

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

Ely
Clyde

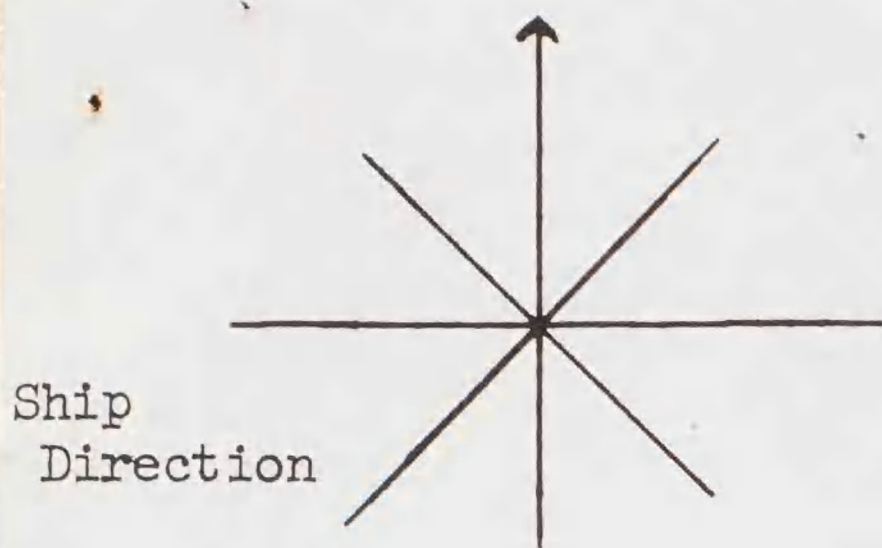
Date 25 Aug. 1967
Pg. # 10

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0600	1000	1000	1000	1000	1000
0605	1000	1000	1000	1000	1000
0610	1000	1000	1000	1000	1000
0615	1000	1000	1000	1000	1000
0620	1000	1000	1000	1000	1000
0625	1000	1000	1000	1000	1000
0630	1000	1000	1000	1000	1000
0635	1000	1000	1000	1000	1000
0640	1000	1000	1000	1000	1000
0645	1000	1000	1000	1000	1000
0650	1000	1000	1000	1000	1000
0655	1000	1000	1000	1000	1000
0700	1000	1000	1000	1000	1000
0705	1000	1000	1000	1000	1000
0710	1000	1000	1000	1000	1000
0715	1000	1000	1000	1000	1000
0720	1000	1000	1000	1000	1000
0725	1000	1000	1000	1000	1000
0730	1000	1000	1000	1000	1000
0735	1000	1000	1000	1000	1000
0740	1000	1000	1000	1000	1000
0745	1000	1000	1000	1000	1000
0750	1000	1000	1000	1000	1000
0755	1000	1000	1000	1000	1000
0800	1000	1000	1000	1000	1000
0805	1000	1000	1000	1000	1000
0810	1000	1000	1000	1000	1000
0815	1000	1000	1000	1000	1000
0820	1000	1000	1000	1000	1000
0825	1000	1000	1000	1000	1000
0830	1000	1000	1000	1000	1000
0835	1000	1000	1000	1000	1000
0840	1000	1000	1000	1000	1000
0845	1000	1000	1000	1000	1000
0850	1000	1000	1000	1000	1000
0855	1000	1000	1000	1000	1000
0900	1000	1000	1000	1000	1000
0905	1000	1000	1000	1000	1000
0910	1000	1000	1000	1000	1000
0915	1000	1000	1000	1000	1000
0920	1000	1000	1000	1000	1000
0925	1000	1000	1000	1000	1000
0930	1000	1000	1000	1000	1000
0935	1000	1000	1000	1000	1000
0940	1000	1000	1000	1000	1000
0945	1000	1000	1000	1000	1000
0950	1000	1000	1000	1000	1000
0955	1000	1000	1000	1000	1000
1000	1000	1000	1000	1000	1000
1005	1000	1000	1000	1000	1000
1010	1000	1000	1000	1000	1000
1015	1000	1000	1000	1000	1000
1020	1000	1000	1000	1000	1000
1025	1000	1000	1000	1000	1000
1030	1000	1000	1000	1000	1000
1035	1000	1000	1000	1000	1000
1040	1000	1000	1000	1000	1000
1045	1000	1000	1000	1000	1000
1050	1000	1000	1000	1000	1000
1055	1000	1000	1000	1000	1000
110					

[illegible]

SI-MNH-958-e
Rev. 5-66



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Ely
Chap

Date 25 Aug. 1967
Pg.# 2

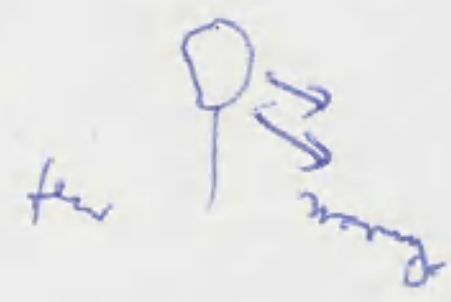
SPECIMEN

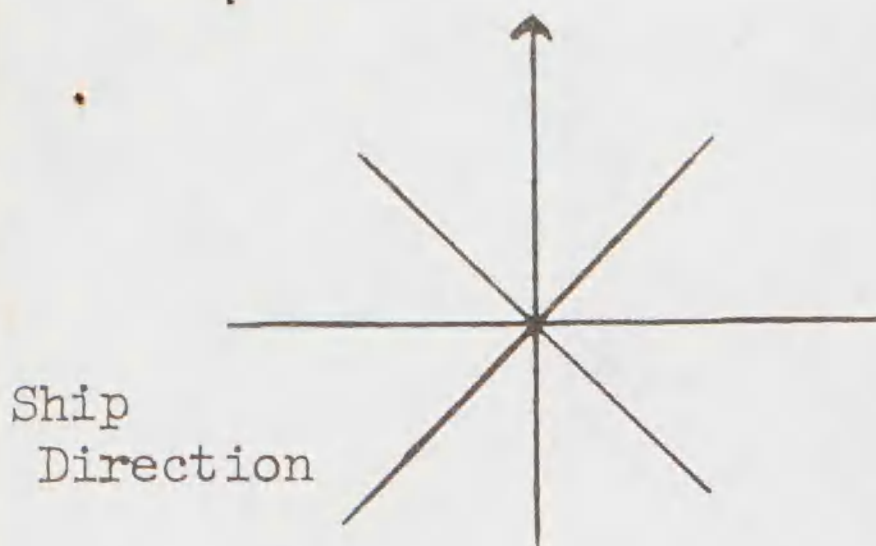
or

TIME SPECIES # DIR. BAND NO. REMARKS

0725	Bl. Noddy	50 ±	←		Bird numbers dropped tremendously as we approached line of island, but increased
-0730	Bl. Noddy	5 +	←		
	wt sh.	5 +	←		
0735	S. tern	20			rough sk.
	wt sh.	10			
	Bl. Noddy	2			
	Bl. Noddy	10			
	Bonin Pet	1			
0740	S. Frig.	1			st.
	S. Phoe	1	→		
	S. tern	40			
	wt sh.	6			
	Bl. Noddy	2			
0745	S. tern	23			- not a flock
	wt sh	1			
	Bonin Pet?	1			
0746	wt sh	4			many flocks toward island; birds out to sea.
	S. tern	9			
0747	S. tern	5			
	wt sh.	5			
0749	S. tern	9			not a flock
	wt sh	5			
	Bon Pet	1			
0753	Bonin Pet	1			→ toward Laysan
	S. tern	10			
	wt sh.	5			
0753	S. Frig	1			
0754	turnstone	1	→	toward Laysan	
	wt sh.	10			
	S. tern	10			
	Bon Pet	1			
0755	S. tern	12			
-0800	wt sh.	10			
	Bl. Noddy	1			

horizontal sweep





SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Chapman
Ely

Date 25 Aug. 1967
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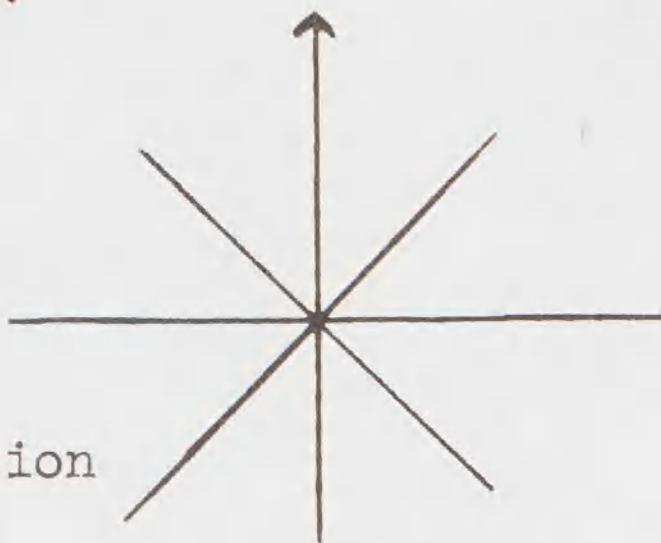
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0800	S. tern	2			
0805	wt shear	2			
	Bl noddy	2			
	Br. noddy	1			
	w. tern	1			
0807	Bonin Pet	1	←		
0807	S. tern	1	→		
0807	wt shearwater	1	↗		
0808	Bonin Pet	1	←		
0809	S. tern	2	→		
	wt shear	2	→		
0810	Bonin Petrel	1	←		
0810	S. tern	1	↗		
0812	Bonin Petrel	1	←		
0812	S. tern	1	→		
0813	Bonin Petrel	1	←		
0813	Bonin Petrel	1	←		
0813	S. tern	1	→		
0813	wt shear	1	→		
0814	wt shear	1	→		
0815	Bonin Petrel	1	←		
0816	wt shear	3	→		
0816	S. tern	2	→		
0817	S. tern	1	→		
0817	Bonin P	1	←		
0818	wt shear	1	→		
0818	S. tern	5	→		
0818	S. tern	6	←		high
0819	white tern	1	↘		
0820	D. frigate	1	↘		imm.
0822	wt shear	1	→		
0822	S. tern	1	→		
0823	S. tern	1	→		
0823	B. f. Booby	1	↑		ad.
0824	wt shear	1	↘		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Clayton
Ely

Date 25 Aug. 1967
Pg. # 4

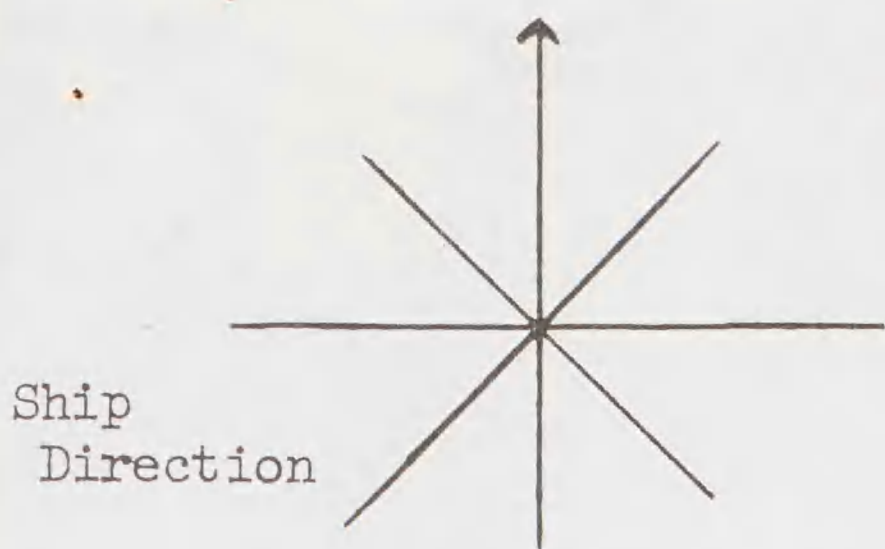
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

TF	0826	wt sh	1	→	
	0826	ster	12	→	
	0827	wt shear	1	→	
	0827	S. tern	9	↘	
	0828	wt shear	2	←	
	0829	Bonin Pet.	1	←	
	0829	wt shear	1	←	
	0829	S. tern	1	↘	
	0830	wt shear	1	←	
	0831	Bul Pet	1	↗	
	0833	Bonin Pet	2	←	
	0834	white tern	1	←	
	0836	Br. noddy	1	→	
	0836	Sooty tern	2	→	
	0837	Bonin Pet.	1	→	
	0837	wt shear	1	←	
	0839	Bonin Pet.	1	←	
	0839	Sooty tern	1	↘	
	0841	R. f. Booby	1	←	ad.
	0841	Bonin Pet	4	←	
	0842	wt shear	1	←	
	0843	Bonin Pet	2	←	
	0844	Bonin(?)	1	←	
	0846	wt shear	1	←	
	0847	Bonin Pet	1	↘	
	0847	Bonin P(?)	1	↗	
TF	0848	Sooty tern	9	→	
TF	0850	S. tern	7	↘	
	0850	wt shear	1	←	
	0852	wt shear	1	←	
	0854	wt shear	2	↗	
	0855	S. tern	3	↘	
	0855	wt shear	2	←	
	0858	wt shear	2	←	
	0859	S tern	2	←	disturb
	0900	wt shear	2	←	
	0900	S. tern	4	↘	

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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

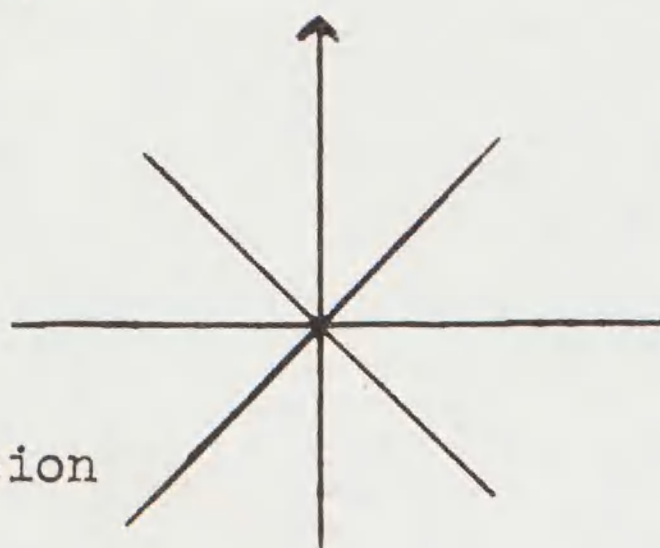
OBSERVERS:

Chapman
Ely

Date 25 Aug. 1967
Pg. # 5

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0903	Sooty Tern	4	↗		
0905	W.t. shear	2	↖		lt. phase
0905	Sooty Tern	1	→		ad.
0906	W.t. shear	1	→		lt phase
0907	W.t. shear	1	↗		lt phase
0907	Sooty Tern	1	→		ad.
0908	Bonin Petrel	1	↖		
0911	Bonin Petrel	1	↖		
0912	W.T. Sh.	1	↖		lt. phase
0913	Sooty Tern	2	↖		ad. very high 150 feet +
0918	Bonin Petrel	1	↖		
0919	Bonin Petrel	1	→		
0920	Bonin Petrel	1	↖		
0920	W.T. Shear	1	→		ad. distant
0923	Shear-pet.	1	→		
0925	Bonin Pet.	1	↖		
0928	Sooty Tern	1	↖		ad
0928	Sooty Tern	1	↖		ad
0929	Shear-pet	1	↖		
0933	W.T. Sh.	1	→		lt. phase
TS? 0934					4-8 birds by 86 terns? petrels? 1 booby?
0939	Shear-pet	1	↖		
0940	Bonin pet	1	→		
0941	Sooty Tern	1	↗		ad
0941	W.T. Shear	1	↖		lt. phase
0943	Bonin Pet	1	↗		
0946	Bonin Pet	1	↖		
0948	W.T. Shear	1	↖		
0949	Bonin Pet	1	→		
0949	Bonin Pet	1	↖		lt. phase -
0950	W.T. Shear	1	↖		
0952	Shear-pet	1	↖		
0953	W.T. Shear	1	↗		lt phase
0954	Bonin Pet	1	↖		
0956	Sooty Tern	1	↖		ad



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

El
Clapp

Date 25 Aug 67
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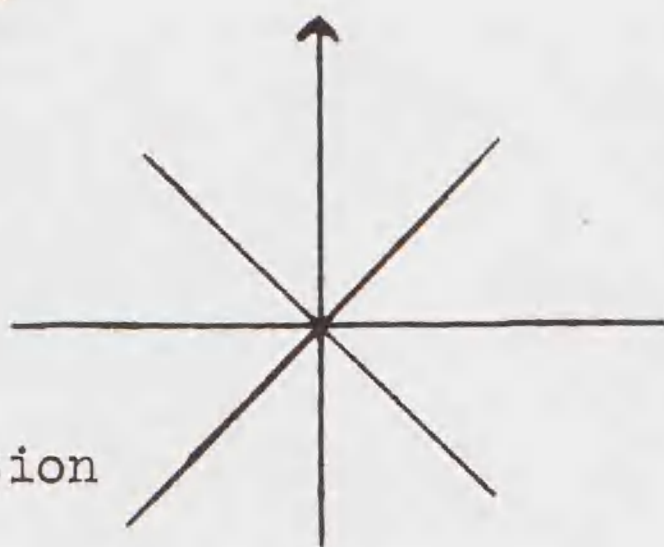
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1000	Sooty Tern	1	→		ad
1007	shear/pet	1	→		distant (prob. wts)
1008	Red ft. bul	2	↓		directly over ship
1008	Bul Pet	1	→		
1008	Brown Pet.	1	→		looked on H ₂ O briefly
1009	Sooty Tern	1	→		ad
1010	Brown Pet	1	→		
1010	wt shear	1	←		
1011	wt shear	2	←		
1011	Sooty Tern	1	→		
1013	Brown Pet	1	←		
1016	Brown Pet	1	←		
1018	Brown B.?	1	→		distant
1021	Brown B.?	1	→		distant
1022	wt shear	1	→		
1023	Brown B	1	←		
1023	wt sh w	1	→		
1029	wt sh w	1	←		
1032	Brown Petrel	1	←		
1032	Red f Body	1	←		ad
1032	Red ft bul	1	↓		ad. over ship
1032	Sooty tern	1	↓		high over ship (ad)
1035	Brown Petrel	1	←		
1035	Brown Pet	1	↓		close
1040	Brown Pet	2	↓		distant
1041	Brown B(?)	1	→		
1043	wt shear	1	↑		ad
1045	wt shear	1	↑		distant
1047	Brown B	1	←		close
1050	wt sh	1	↑		distant
1052	shear/pet	1	←		
1054	wt sh.	1	↓		not actually feeding but circling while moving
1059	S tern	21	→		
	wt a	10±	→		
	Brown Pet	2	→		
1100	Christmas Is	1	↓		dark, diff. smaller than w.t. sh.
	wt sh	1	↓		
1103	S tern	3	→		
	Brown Pet	1	→		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Clay
Ely

Date 25 Aug 67

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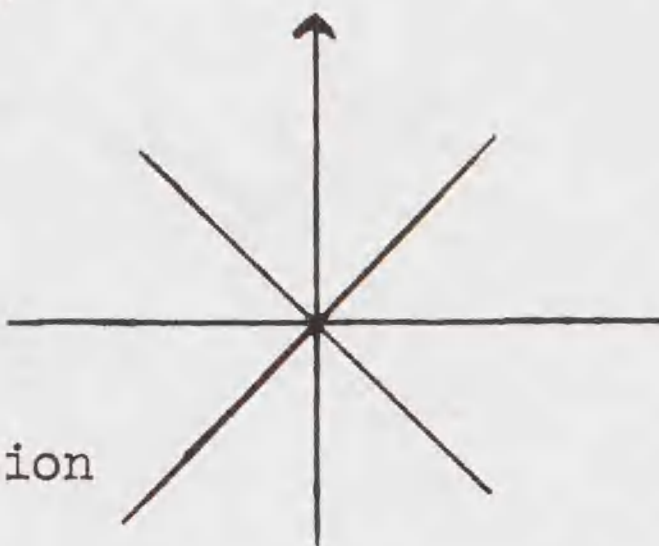
SPECIMEN

or

DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
TF 1104	S. tern	7	↑		
1105	W.T. Shear	1	↙		H. phase
1105	S. tern	1	↗		
1105	W.T. Shear	1	↙		
1107	W.T. Shear	1	↙		H. phase
1109	Bonin Petrel	1	↘		
1111	Shear-pet	2	→		— one prob. WT Sh.
1113	Sooty Tern	1	↓		ad
1118	W.T. Shear	1	↙		} H. phase
1118	W.T. Shear	1	→		
1119	W.T. Shear	1	↙		} resting resty flock at least half the total of wedgetails sity on water before & after ship passed flock. 1 Bonin Noddy was also probably roosting on H ₂ O. Sooties low to about 40 or 50 feet - Wedgetails on surface of water were facing into the wind. All W.T. Sh. seen were light phase
TF 1125	Sooty Tern	25	↘		
	W.T. Shear	50			
	Bonin Noddy	1			
1129	W.T. Shear	1	↗		
1129	W.T. Shear	1	↗		
1133	W.T. Shear	1	↙		H. ph.
1135	W.T. Shear	2	↙		
1141	W.T. Shear	1	↙		
1150	W.T. Shear	2	↘		
1153	W.T. Shear	1	↘		
1153	Bonin Petrel	1	↙		
1154	W.T. Shear	2	↓		
1154	W.T. Shear	2	↙		
1203	W.T. Shear	1	↙		
1203	sooty/shear?	1	↗		distat; dark, different flight, very fast
1213	W.T. Shear	3	↘		oft
1215	W.T. Shear	1	→		
1228	Bonin Pet	1	→		
1231	W.T. Shear	1	↑		
1234	Bonin Pet	1	↗		
1238	Sooty tern	3	↘		very low over H ₂ O
1238	W.T. Shear	1	↙		
1243	Rt. T. bird	1	↑		Imm. (black bill)

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

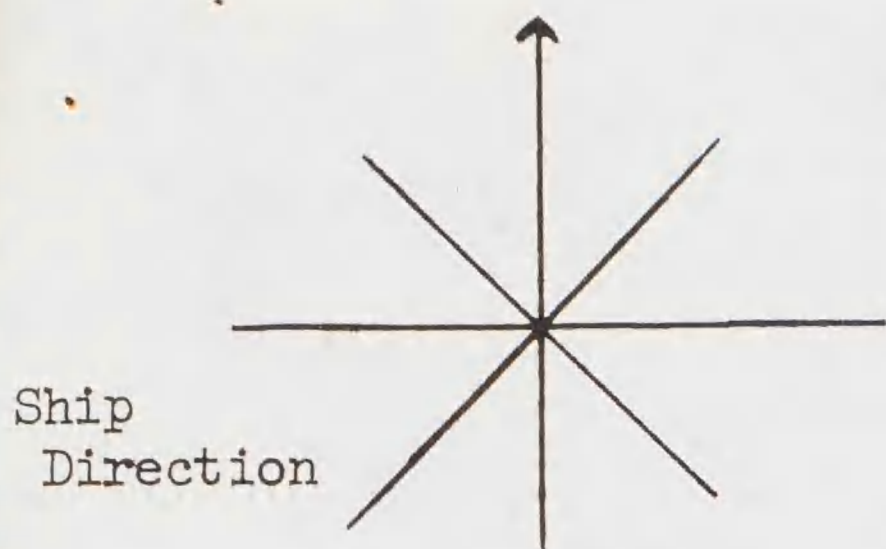
Chapman
Ely

Date 25 Aug. 1967
Pg. # 8

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

FF	1244	turnstone	1	↗		imm. plumage - circled ship 3 times
	1249	R+t bird	1	↑		ad., over ship.
	1253	S. tern	20			
		B. noddys	20			
		wt. sh.	35			definitely hitting water - no flying fish
		RFB	1			ad. white phase
		turnstone	1			part. same bird
	1254	wt. sh.	3	↙		circled ship again.
	1256	wt. sh.	2	↙		
	1258	Bonin Pet	1	↙		
	1300	RTTB	1	↙		only 1/2 of 1 central tail feather grown
	1304	WT Shear	1	↙		Coming up on ship from a stern
	1313	Bulwers	1	↗		It. phase
	1314	Bonin P.?	1	↙		maybe Bonin Petrel - Very light back, presumed
	1320	Shear-petrel	1	↙		
	1320	Bonin P	1	↗		
	1321	W.T. Shear	1	↗		It. phase
	1324	Brd sp.	1	↙		var. dub.
	1325	W.T. Shear	1	↙		It. phase
	1325	Bulwers	1	→		
	1330	W.T. Shear	1	↙		It. phase
	1332	Frigate	1	↓		imm? or P?
	1334	W.T. Shear	1	↓		It. phase
	1335	WT Shear	1	↙		It. phase
	1336	WT Shear	1	↙		It. phase
	1338	Bonin Petrel	1	↗		It. phase
	1338	W.T. Shear	1	↙		It. phase
	1340	W.T. Shear	1	↙		It. phase
	1342	W.T. Shear	1	↙		It. phase
	1345	W.T. Shear	1	↙		It. phase
	1350	Sooty Tern	1	↙		angle & light based
	1353	W.T. Shear	2	↙		
	1354	WT Shear	1	↙		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

El
Clapp

Date 25 Aug 67

Pg.# 89

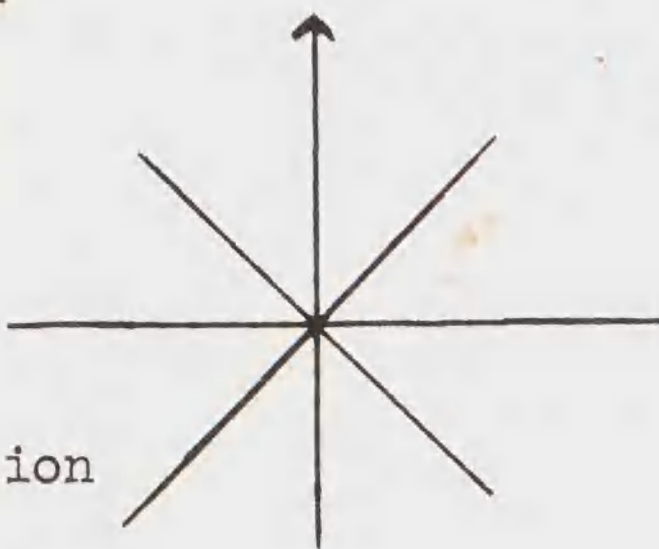
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1355	WT Shear	1	↖		H. phase
1356	WT Shear	1	↖		H. phase
1357	WT Sh.	1	↖		H. phase
1357	Sooty Tern	1	↖		adult
1358	WT Shear	1	↖		Good view - passy at about 100-150' ft. white bellied, white headed subadult plumage
1359	Frigate	1	↓		
1400	Bulwers	1	↖		
1400	W.T. Shear	1	↖		
1401	W.T. Shear	1	↖		
1401	WT Shear	1	→		
1405	Brown P.	1	→		
1406	Bulwer P	1			attending in H ₂ O, flew 50' to strand & alighted.
1407	W.T. shear	1	↑		
1409	W.T. shear	6	↗		line flock?
1411	W.T. shear	2	↗		
1412	W.T. shear	7	↗		
1418	and off pt	2	↗		
1419	W.T. shear	1	↗		
1420	W.T. shear	4	→		
1421	W.T. shear	2	→		
1422	W.T. shear	4	↖		
1422	Brown Pet	1	→		
1426	Brown Petrel	4	↖		
1426	W.T. shear	2	→		
1427	W.T. shear	2	↗		
1428	W.T. shear	13			seen in H ₂ O
	Brown Pet	2			
1433	8 Bay	1			seen
	Sooty Tern	20			500-800 yds off
	W.T. sh	20			
1437	W.T. sh.	1	↗		
1439	W.T. sh.	2	↖		
1441	W.T. sh	1	↓		
1443	W.T. sh.	2	↗		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Clayton
Shy

Date *25 Sept. 1967*
Pg. # *10*

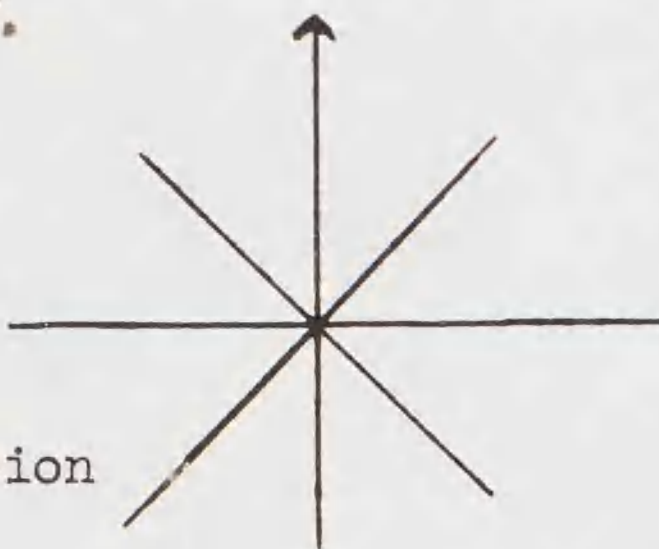
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1445	Bonin Pet.	1	↑		
1446	w.t. sh.	4	↑		
1447	w.t. sh.	2	↑		
1448	w.t. sh.	1	↑		for some time now birds have been coming along & passing vessel.
1450	Sooty tern	1	↑		
1450	Bonin Pet.	2	↑		
1452	Bonin Pet.	4	↑		
1453	Bonin Pet.	1	↓		
1454	w.t. sh.	1	↓		
1455	Bonin Pet.	1	←		fast
1457	Bonin Pet.	1	↓		
1458	Bonin Pet.	1	→		
1458	w.t. sh./pet	3	↑		at start
1459	w.t. sh.	1	←		
1459	w.t. sh.	1	?		
1459	w.t. sh.	1	?		
1459	w.t. sh.	1	←		H. phase
1500	w.t. sh.	2	←		alt. phase
1500	w.t. sh.	1	←		H. phase
1502	w.t. sh.	1	←		
1503	Fringes	1	↓		very high
1504	w.t. sh.	C. 6	↑		ca. 25 birds along horizon line all moving ↑ - seem to be all shear-pets.
1504	Bonin P.	C. 4	↑		
1508	Bonin Pet.	1	→		has double underwing only, heavier at joint & other underwing slash.
1511	Bonin	1	←		
1515	Bonins	1	←		
1515	Bonins	1	←		
1515	Bonins	1	←		
1517	Bonins				ca 25 in sight at one time mostly headed towards horizon
1518	w.t. sh.	1	→		
1520	w.r.s. petrel	1	↓		close to ship
1521	Sooty tern	1	←		
1523	w.t. sh.	1	←		
1533	stopped Counting White tern	Bonin Petrels			from 30-50 scattered, (esp. toward horizon) at all times

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

close
sky

Date *25 Aug. 1967*
Pg. # *11*

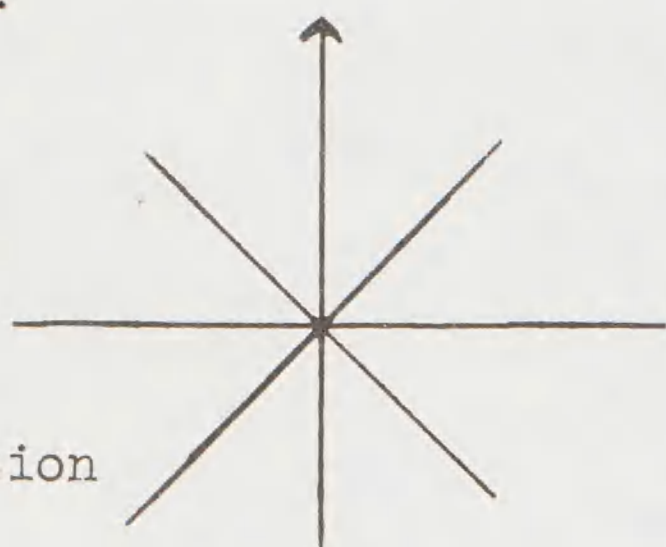
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1534	Sooty tern	1	→	ad.	
1543	Brown Pet.			large #s, 1 large flock of 60+	
1550	w.t. sh.	1	←		
1551	w.t. sh.	1	→		
1553	Bonins	10-20		seen at one time, most vectoring in	
1555	w.t. sh.	1	→	general direction of hisianski -	
				it phase	
	birds passing bow per minute - 1558 - 59:10				
1603	Bulwer's	1	←		
1604	Bonin Pet.	6		first seen sitting together on water.	
				After flushing one of this group realized	
				on the water. Many others coming along	
1611	Sooty Tern	1	↑	regularly	
				ad.	
1615				numbers of passing petrels decreasing considerably	
1616	shear-pet.	1	←	c. 1613-1614. Re-bagging cart at 1615	
1620	Brown Pet.	2	←		
1624	Brown Pet.	1	↑		
✓ 1625	shear-pet	12		scan of 180°	
1626	Brown Petrel	6	↓		
✓ 1628	Brown Petrel	19	↙	prob. heading to Lisianski	
1630	w.t. sh.	1	←		
✓ 1631	shear-pet	20	↔	far out	
1632	Sooty tern	3	↓		
✓ 1632	Brown Pet.	6	↑↓		
1640	Sooty tern	1	→		
1644	Sooty tern	3	→		
1644	Brown Petrel	4	↓	sub-angle	
1645	w.t. sh.	1	→		
1647	white tern	2	←		
✓ 1647	shear-pet	10±		scattered in distance	
1648	Brown Pet.	2	→		
1648	w.t. sh.	1	→		
1649	Brown Pet.	2	←		
1651	Brown Pet.	4	↘		
1652	Brown Pet.	2	↘		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

clay
Elly

Date *25 Aug. 1967*

Pg. # *12*

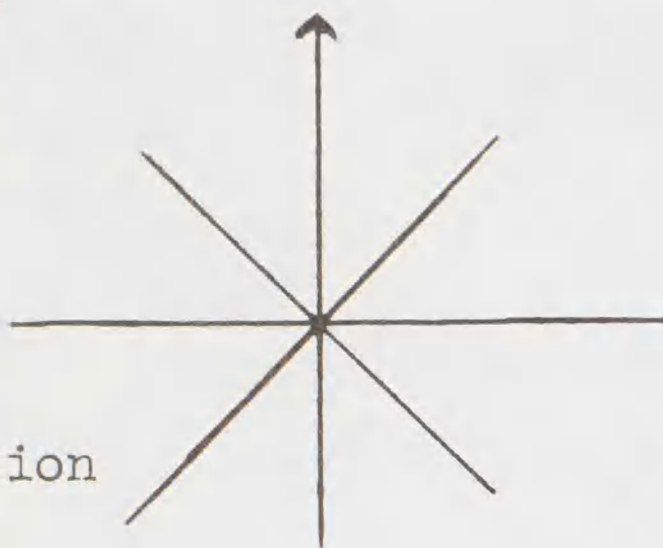
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1653	Brown Petrel	2	↓		
1654	w. t. shear	1	↓		
1655	Brown Petrel	1	↓		
1656	Brown Petrel	2	↓		
1656	Brown Petrel	1	↓		
1658	Brown Petrel	1	↓		
1707	Brown Petrel	7	—		long "flock?" 25 mi N. Lisowski
1712	Brown Petrel	3	↓		
1713	Brown Petrel	1	↓		
1714	Brown Petrel	3	↓		
1715	Laysan albatross	1	—		Down on H ₂ O; still some brown down on head.
1715	Brown Petrel	5	↓		loose "flock?"
1717	RHB	1	→		ad.
1717	Brown Petrel	5	↓		prob. argls.
1721	Laysan alb.	1	↑		imm. prob. same bird.
1723	Brown Petrel	3	↓		
1724	Brown Petrel	4	↓		
1726	Brown Petrel	3	↓		
1728	Brown Petrel	2	↓		
1728	w. t. shear	1	↓		
1730	w. t. shear	1	↓		
1731	shear/pet	1	↓		
1732	Sooty tern	2	↓		
1732	Brown Petrel	2	↓		
1732	Sooty Bl.	1	→		
1733	Brown Petrel	3	↓		
1733	w. t. shear	1	↓		
1735	Brown Petrel	3	↓		
1736	Brown Petrel	4	↓		
1736	w. t. shear	1	↓		
1737	Brown Petrel	4	↓		
1741	Brown Petrel	3	↓		
1745	Brown Petrel	3	↓		
1747	Brown Petrel	2	↓		
1748	Brown Petrel	3	↓		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Clayton
Ely

Date *25 Aug. 1967*

Pg. # *13*

SPECIMEN

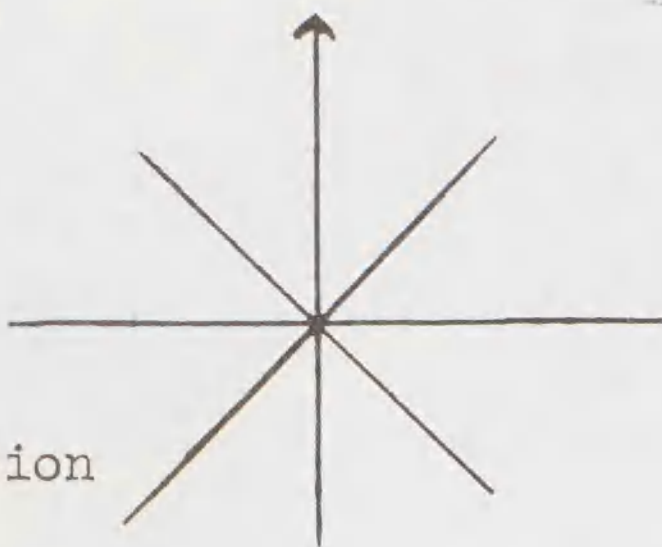
or

TIME SPECIES # DIR. BAND NO. REMARKS

1751	Bonin Petrel	1	↓		
1753	Bonin Petrel	2	↓		
1754	Bonin Petrel	4	↓		
1755	Bonin Petrel	1	↓		
1755	Bonin Petrel	1	↓		
1756	Bonin Petrel	2	↓		
1758	Bonin Petrel	2	↓		
1800	Bonin Petrel	1	↓		
1800	Bonin Petrel	1	↓		
1801	Bonin Petrel	2	↓		
1802	Bonin Petrel	1	↓		
1803	Bonin Petrel	2	↓		
1804	Bonin Petrel	1	↓		
1804	Bonin Petrel	1	↓		
1805	Bonin Petrel	1	↓		
1806	Bonin Petrel	1	↓		
1806	Bonin Petrel	1	↓		
1807	Bonin Petrel	1	↓		
1807	S. Petrel?	1	↓		
1807	Booby sp	1	↓		Red-foot or Blue-face
1809	Bonin Petrel	1	↓		
1810	Bonin Petrel	1	↓		
1812	Bonin Petrel	1	↓		
1813	Bonin Petrel	1	↓		
1814	Bonin Petrel	1	↓		
1815	W.T. Shear	1	↓		
1815	W.T. Shear	1	↓		
1816	Bonin Petrel	1	↓		
1816	W.T. Shear	1	↓		
1817	W.T. Shear	1	↓		
1818	Bonin Petrel	1	↓		
1819	Bonin Petrel	1	↓		
1820	Bonin Pet?	1	↓		
1821	Bonin Petrel	1	↓		
1822	W.T. Shear	1	↓		
1823	Bonin Petrel	1	↓		
1824	Bonin Petrel	1	↓		
1824	Bonin Petrel	1	↓		
1825	Bonin Petrel	1	↓		
1825	Bonin Petrel	1	↓		

(45)

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Ely, C. A.
Clapp, R. B.
& "Frenchy"

Date 25 Aug. 67
Pg. # 14

SPECIMEN
or

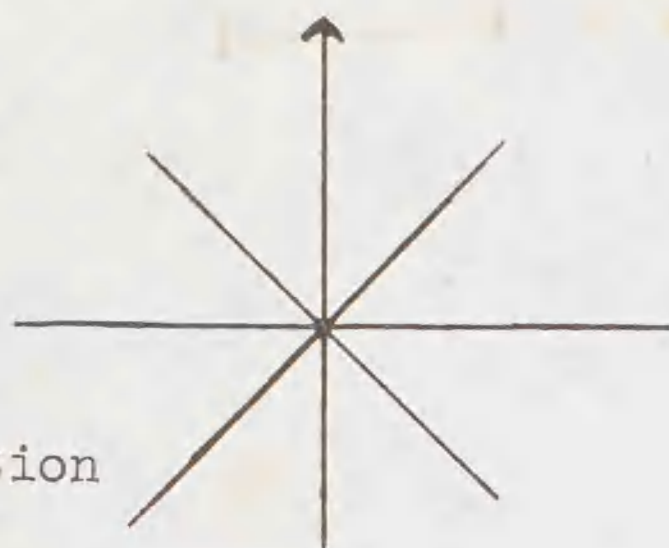
TIME SPECIES # DIR. BAND NO. REMARKS

1827	Bonin Petrel	1	↓		All Wedge-tails on this page were light phase birds -
1828	Shear-pet	1	↓		
1829	Bonin Petrel	1	↓		
1829	Bonin Petrel	1	↓		
1830	Wedge T. Sh.	1	↓		
1832	W.T. Sh.	1	↓		
1836	W.T. Sh.	1	↓		
1836	Bonin Petrel	1	↓		
1839	Bonin Petrel	1	↓		
1842	Bonin Petrel	1	↓		
1842	W.T. Shear	1	↓		
1843	Bonin Petrel	1	↓		
1844	W.T. Shear	1	↓		
1844	Bonin Petrel	1	↓		
1845	W.T. Shear	1	↓		
1845	W.T. Shear	1	↓		
1846	Bonin Petrel	1	↓		
1847	W.T. Shear	1	↓		
1848	W.T. Shear	1	↓		
1849	Bonin Petrel	1	↓		
1850	Shear-pet	1	↓		
1853	Bonin Petrel	1	↓		ad -
1854	Bonin Petrel	1	↓		
1855	Bonin Petrel	1	↓		
1856	Bonin Petrel	1	↓		
1917	Bonin Petrel	2	↓		
1922	Bonin Petrel	1	↓		
1925	petrel/shear	1	↓		
1930	Bonin Bonin Petrel	1	↓		
1943	Bl. f. Booby	1	↓		
1948	Bonin Pet	2	↓		
1952	Bonin Pet	1	↓		202 Bonin Petrel
1955	sh/pet	1	↓		
1958	Bonin Pet	1	↓		
1958	Sooty tern	1	↓		
1959	Bonin Petrel	1	↓		
2001	Bonin Petrel	1	↓		
2010	Bonin Petrel	1	↓		
2014	Bonin Petrel	1	↓		



0° 0°

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Ely
Ciddyp

Date 26 Aug, 67
Pg.# 1

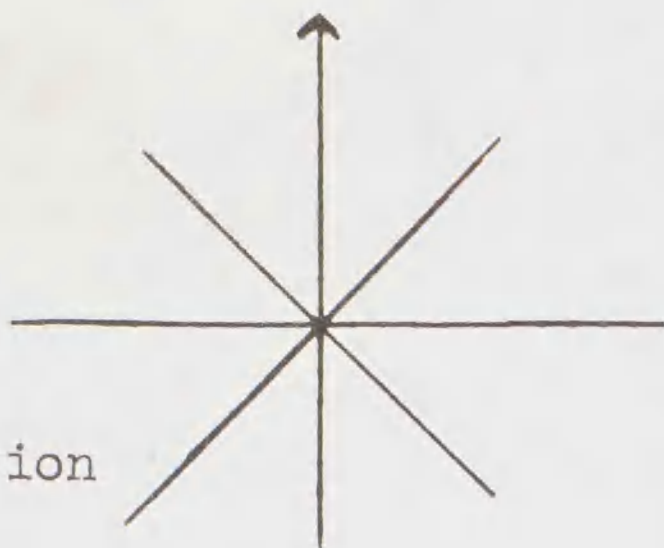
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0708					watch begun -
0709	Shear-Pet	1	←		
0710	W.T. Shear	1	↓		It. phase
0719	W.T. Shear	1	↓		It. phase
0728	Sooty Tern	3	→		
0729	RTTB	1	↗		
0733	Fairy Tern	1	↗		
0743	RTTB	2	↗		- Flying towards and away from ship at ca. 200 ft ... higher than fishy height.
0752	Bonin Petrel	1	↗		many have
0758	RTTB	1	↗		
0801	W.T. Shear	1	←		It. phase
0805	Shear-pet	1	→		Prob. Bonin.
0808	Bonin Petrel	1	←		
0809	Bird sp	1			not seen by me
0811	Shear-pet.	1	←		far out
0813	Sooty Tern	3	→		ad.
0816	FT	3	↗		disturb - could be RTTB?
0824	Bonin Petrel	1	↘		
0827	Sooty Tern	3	←		adult
0827	W.T. Shear	1	←		white-phase
0828	Bonin Petrel	1	↘		
0829	Sooty Tern	1	←		ad.
0829	Fairy Tern	2	↘		
0830	W.T. Shear	1	↓		It. phase
0831	W.T. Shear	1	↗		It. phase
0832	W.T. Shear	1	↗		It. phase
0833	Shear-pet	1	←		
0834	Sooty Tern	1	↘		ad.
0834	Sooty Tern	1	↓		ad.
0835	Sooty Tern	1	↘		ad. Flying about 10-15 feet above water, but interrupted sharply flight to dive to water to grab at something. Did not enter water. Entire episode of several strokes by two birds took less than 10 seconds. Birds then continued on course.
0839	Bird sp.	1	←		not seen by me
0843	W.T. Shear	1	↓		It. phase
0844	Sooty Tern	1	←		ad
0850	Bonin Petrel	1	←		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

C. Lepp
Cly

Date 26 Aug. 67
Pg. # 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0856	Shear-pet.	1	↙		- way out
0858	Fairy Tern	1	↓		
0858	Bird sp.	1	↖		
0859	Bonin Petrel	1	↖		
0908	Bonin Petrel	1	→		
0912	Bonin Petrel	3	→		
0917	Bonin Petrel	1	←		
0918	Ptt bird	1	↗		
0919	Bonin Petrel	1	←		
0921	White tern	1	→		
0921	Bonin Pet	1	→		
0922	Bonin Pet	1	→		distant
0923	White tern	3	→		
0923	Bonin Pet	4	↘		not together
0927	w.t. shear	1	←		distant
0929	sh/pet	1	←		
0930	w.t. shear	2	↘		
0932	w. tern	1	↘		
	S. tern	7	↘		straight line flight
0936	Bonin Petrel	1	→		
0939	White tern	2	↘		
	Sooty tern	4	↘		
0939	w.t. shear	1	→		all terns seem to be working same direction
0941	Bonin Petrel	2	→		
0942	White tern	3	↖		
0942	Ptt bird	1	→		
0943	Bonin Pet	2	→		
0946	w.t. shear	1	←		
0946	Bonin Pet	3	→		
0950	S. Plover	1	→		
	turnstone	1	→		
0951	Sooty tern	2	↑		
0953	Bonin Petrel	2	→		distant
0953	w.t. shear	3	→		
0956	S. Plover	1	→		♀
0957	w. tern	1	↓		
0959	Bonin Pet	2	↘		
0959	White tern	2	↘		

1001 - Sooty Tern	3	↗	circling
1001 - Rttb	1	↗	hi over ship
1003 - Rttb	1	→	
1003 - Bonin P.	1	↗	
1003 - Shear-Pet.	1	↖	
1004 - Bonin P.	1	↗	
1004 - Shear-Pet	1	↖	
1004 - W.T. Shear	1	↖	H. phase
1005 - Xmas Is. ?	1	↖	probably - looked too lg + heavy for Blues
1005 - W.T. Shear	1	→	light phase
1005 - Sooty Tern	2	↗	adults
1005 - White Tern	2	↗	
1006 W.T. Shear	1	→	light phase
1006 W.T. Shear	4	↖	all light phase, sitting cult when not seen
1007 Bonin P.	1	↗	
1007 Shear. - pet.	1	↗	
1008 W.T. Shear	1	↖	light phase
1009 Bonin - P.	1	↖	
1011 Bird - sp	1	→	way out - prob - shear pet -
1012 Fairy Tern	2	→	ca 40-60 ft. off water
1012 Fairy Tern	1	↗	
1013 Bonin P.	1	↗	
1014 Bonin P.	1	↖	
1015 Fairy Tern	2	↖	Both apparently fishing while
1018 Bonin P.	1	↖	traveling. Strike is made from about
1021 Fairy Tern	1	↖	20 feet in a curved path dive
1022 W.T. Shear	1	↖	Hph. thru ^{thru} Bird picks at water surface
1023 Bonin P.	2	↗	at nadir of sweep and pulls partially
1024 Bonin P.	1	↗	up to hover above water. Birds also
1025 Fairy Tern	1	↖	showed "intention dives" (?) which
			were not full = Intention dive
			followed by strike gave flight path
* also fishing		40	

1026	Fairy Tern	2	↘
1028	Fairy Tern	2	↗
1030	Shear-pet.	1	←
1032	W.T. Shear	1	←
1033	Fairy Tern	1	↓
1036	Bonin P.	1	←
1038	Bonin P.	1	↗
1038	Bonin P.	1	↗
1039	Fairy Tern	1	↗
1039	Bonin P.	1	↑
1040	W.T. Shear	1	→ It. phase
1041	W.T. Shear	1	→
1041	Sooty Tern	1	→ ad.
1043	Fairy Tern	1	→

— watch — ended

1043
0708
—
335

24 Aug. 1967

times are correct to 1 hr; # of entries is nearly
correct; # & time of individual entries may be off by up to
1 hr. except those marked *

sheet 1 - lost
duplicated from memory
Cag.

species + # of individuals
from memory & guess.
except for less common forms

Began watch 061

* 0620 - Great Frigatebird - still not light.

↓

0640 - w.t. shearwater 1
0645 - w.t. sh. 1
0700 - w.t. sh. 1
0705 - unid shearwater 1
0710 - w.t. sh. 1
0715 - w.t. shearwater 1
0720 - w.t. shear. 1
0730 - w.t. shear. 1
0735 - w.t. shear. 1
0740 - w.t. shear. 1
0800 - red-f. t. bird 1 ad.
0805 - w.t. shear. 1
0810 - white tern 1
0815 - Sooty Tern 2 ↑
0820 - white tern 1
0825 - w.t. shear 1
0830 - w.t. shearwater 1
0835 - Sooty tern 1
0840 - w.t. shearwater 1
0845 - w.t. shearwater 1
0850 { Sooty Tern 2
TF { Gray & Tern 1
w.t. shearwater 1
0900 - w.t. shearwater 1
0905 - w.t. shearwater 1
0910 - Sooty terns 2
0915 - Bulwer petrel 1
0920 - w.t. shearwater 1
0925 - w.t. shearwater 1

0930 w.t. shearwater 2
0935 w.t. shearwater 1
0940 w.t. shearwater -1
0945 Gr. Frigatebird - 12m. distance
0950 Black-w. petrel - 1
1000 - unid shearwater -1
1000 - w.t. shearwater -1
1020 - w.t. shearwater -1

20 Nov 1967
054 0109

Page 9-13

What is the weather?

50-12-30

57-2-7

60-10-10

60-10-10

10-10-10

10-10-10

620-2-10

620-2-10

10-10-10

10-10-10

10-10-10

10-10-10

10-10-10

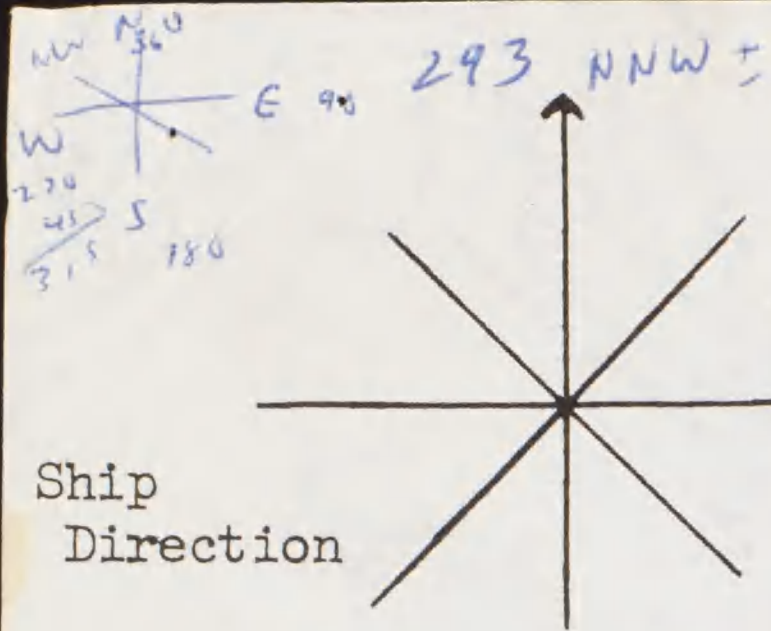
10-10-10

10-10-10

10-10-10

10-10-10

10-10-10



sunset 1946
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Clay (Anguilla laysanensis)
Clapp

Date 24 Aug 67
Pg. # 3

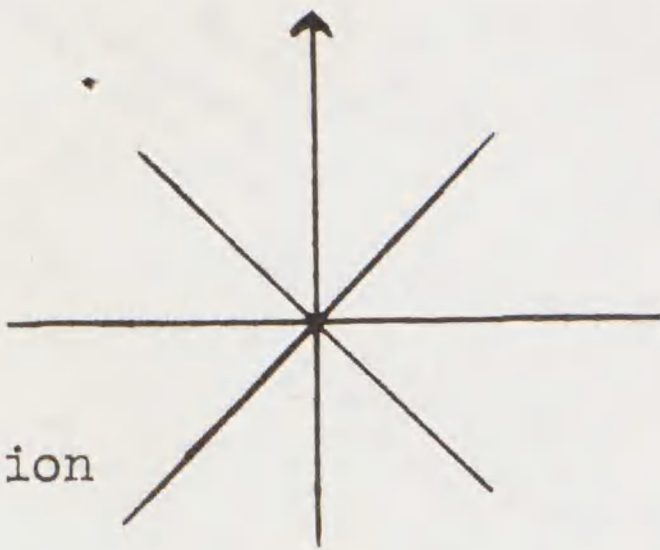
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

	1429	WT Shear	1	↗		H. phase
	1431	WT shear	2	↖		H. phase
	1437	Bulwers	1	→		
	1451	Shear pet?	1	←		distant
	1516	Bulwers	1	↗		
	1526	Bulwers(?)	1	→		
	1537	Bulwers	2	→		very close - possibly sitting on H ₂ O prior to observation.
	1541	Bulwers	1	↓		
	1555	WT Shear	1	↗		1 H. phase
	1604	unid pet	1	↑		1/2 mi out.
	1616	WT Shear?	1	←		- behind ship on 1/2 mile
	1631	unid bird	2+	?		flock or larger - tern?
	1642	WT shear	1	↑		
	1648	WT shear	1	←		
	1649	WT shear	1	→		distant
	1652	wt. bird	1	↓		overshooting
FF	1652					large flock ahead.
	1657	Sooty tern	65+			millling around; flying fish seen but no tern seen.
		WT shear	40+			
	1659	WT shear	1	←		
	1705	WT shear	1	↘		
	1715	WT shear	2	←		
	1715	WT shear	1	↓		
	1721	unid sh.	1	←		
	1745	WT shear	1	→		
	1752	Sooty tern	1	→		
	1754	WT shear	2	↘		
	1757	WT shear	1	→		
	1807	wtsh.?	1	←		food sun glare
	1810	Shear-pet	1	↑		
	1817	Sooty Tern	2	←		ad.
(T)F	1819	Frigate Terns sp	1	↓		♀ or imm.
			5-10	↓		
		W.T. Shear	1	←		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Clapp
By

Date 24 Aug 67
Pg.# 4

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1821 Sooty Tern 1 ← ad.

1822 W.T. Shear 1 →

1822 " 1 →

1823 " 1 →

1824 " 1 →

1825 " 1 →

1825 Sooty Tern 2 ←

1826 Sooty Tern 1 →

1827 W.T. Shear 1 →

1828 Sooty Tern 2 ↓

1829 W.T. Shear 1 ↓

1831 W.T. Shear 1 →

1836 Newell's (?) 1 ←

1900 Shear-pet? 1 ↓

1901 Bcl sp. 1 ↓

1916 Bird sp. 1 ↓

1917 Sooty Tern 1 →

1945 Sunset

2001 Shearwater 1 →

Silhouette & flight pattern right but bird in sun could not see colors.

not seen by me

ad.

light very pm.

18

20

PRELIMINARY REPORT

EASTERN GRID SURVEY NO. 12

(Eastern Area Cruise No. 22)

25 August - 5 September, 1967

Prepared by

Robert DeLong

EAC 22
EGS 12

Support LT 2080 & 2085 25 - 29 August
Vessels : Granville S. Hall, YAG 40 29 Aug. - 5 Sept.

Personnel: Robert L. DeLong (BIC), Richard D. Chandler, Gerald A. Sanger

Itinerary:	25 August	0800	LT's depart Long Beach - Chandler, Sanger
	25 August	1520-1900	Offshore survey of south coasts, Anacapa, Santa Cruz, and Santa Rosa Islands. Chandler and Sanger. Results included in EAC 23 report
	26-29 August		LT's run Grid from Point ASL & Elm
	28 August	1600	YAG 40 depart Long Beach - DeLong
	29 August	0745	Transfer Chandler & Sanger to YAG 40
	29 August	1120	Re-enter Grid at Point Elm
	4 September	0915	Depart Grid, Point Oak
	5 September	1400	Arrive San Diego

The much-appreciated, excellent cooperation continues to be extended by officers and men of the Granville S. Hall. Fine cooperation was also received from the officers and crews of the LT's.

The departure of the YAG 40 from Long Beach was delayed due to a breakdown in after-steering. The LT's were used for the first third of the Grid survey to prevent disruption of the fall schedule. Seas were small during this first period, providing good observing conditions from the tugs. En route to the Grid the LT made an offshore survey of the south sides of Anacapa, Santa Cruz, and Santa Rosa islands.

During the in-port period in Long Beach a Bathythermograph winch was acquired and installed on the YAG 40. The winch was most generously loaned to us by Scripps Institution of Oceanography for the duration of the work.

Methods

Complete diurnal observations were taken while in the Grid area. Nocturnal observations were taken 29 August through 3 September, both while underway and while laying to. During the 2-1/2 hours of laying-to on 31 August a floating mist net was successfully launched from the ship. During this same period the boat launching platform was lowered and unsuccessful attempts were made to collect cephalopods.

The skiff was used 2 and 3 September for collecting birds while in the southern portion of the Grid. Attempts were made to collect specimens of *Delphinus* from the skiff as well as from the ship.

Bathythermograph casts were made at four-hour intervals in the central and southern portions of the Grid. For reference the BT slides were photographed individually against the calibrated Grid and printed on 8 x 10 contact sheets. A copy of these prints is included with this report as Figure 3.

All positions on this survey and on EGS 10 and 11 are LORAN fixes. LORAN accuracy on the first third northern leg is poor. All other fixes are considered accurate within the limits of LORAN (2 to 5 miles).

Results of Discussion

During diurnal observations from the tugs and YAG of 109.1 hours and 957 miles 452 birds were recorded. These observations are summarized in Table 1. The observations from the two vessels are treated equally. No discussion of the validity of such treatment is undertaken at this time. Nocturnal observations are summarized in Table 3.

Again on this survey diurnal coverage was good in each of the nine sectors of the Grid. Numerical abundance and densities of species groups are included in Tables 4 and 5. North-South and East-West sectional breakdowns are Tables 6 and 7. About 46 percent of the observations were recorded in the northern third of the Grid. A near-equal percentage of observations was recorded in the eastern third. The previously recorded northward movement of storm petrels and their concentrations around Point Dogwood during EGS 10 and Point Ash on EGS 11, plus the presence of most of the phalaropes recorded in the northern and eastern sections strongly suggests the presence of "richer" waters in the northern third of the Grid. The same is generally true of the eastern third of the Grid. The cause for this is believed (without concrete evidence at this time) to be that both of these areas lie in more active areas, i.e., faster flowing, of the California Current. The faster currents affect the north section of the area, then around Point Conception and shift eastward. It then asserts strong influence only on the eastern third of the area. If this rambling hypothesis be correct it would explain bird abundance on the basis of environment rather than by proximity to land masses (which seems a weak explanation for distribution of many recorded pelagic seabirds).

The recorded abundance of Storm Petrels in the southwest section (sector 7) of the Grid is not valid. On 2 September the skiff was used for four hours; during this time 47 percent of the day's total was recorded. This was effected as follows: The seas were calm, increasing the radius of visibility by possibly 2K; the ship was running at 7K, allowing the skiff to work up to 2+ miles on each side of the ship - this again increasing the radius of observation. As all birds seen from the skiff were radioed to the ship and recorded there, it effectively increased the number of birds recorded by two to four times. No effort was made to adjust these data in the presentation as this is difficult to achieve with statistical significance.

Ten Storm Petrels, one Red Phalarope, and one Cook's Petrel were collected in seven hours of skiff operation on two separate days.

Bathythermograph data collected on this trip promise to yield significant environmental data, but at this time we have not analyzed these data.

Efforts to collect birds with floating mist nets were unproductive. Possibly given a smaller ship, i.e., less freeboard thus easier to work from, this technique could be productive; however, a single net set in the sea is a very small sampling device and appears rather insignificant. Attempts to dip-net squid on the one night failed. There were squid in the waters but they remained at depths beyond the range of the dip-net. This is however a proven method of cephalopod collecting and warrants further efforts.

One of the abberant Delphinus was collected from the tugs. Full measurements and photos were taken of this animal. All attempts to collect these animals from the YAG again failed. This animal was very abundant in the Grid during this survey (See SA Manuals). Larger cetaceans were found only in the north and central portions of the Grid.

Black-footed Albatross

Distribution of albatross appears random. The birds showed little inclination to follow the tugs used on the northern legs of the survey. The presence of largely white-faced birds with light-appearing breast and belly feathers was noted.

Pink-footed Shearwater

Two birds were recorded in the northeast section and one in the north-central section of the Grid.

New Zealand (Buller's) Shearwater

One bird was positively identified in the northwest section of the Grid.

Sooty Shearwater

Three birds were recorded in the north and central sections of the Grid. This species is still in low numbers outside the Grid area.

Cook's Petrel

Three birds recorded and one collected. These birds apparently represent stragglers of the mass movements recorded during EGS 10.

Storm Petrels

WRSP	94
DRSP	15
Storm Petrel sp.	90

All birds observed, with one exception, are believed to be Leach's-type Storm Petrels; the exception being a small, all-dark bird observed on 31 August at 32°30' N, 123°19' W. This bird represents the first possible record of a Leach Petrel (Halocyptena microsoma) in the Grid.

The distribution of storm petrels during the survey did not appear random. Densities were high in the north and southern sections of the Grid. Density in the central section appears low; however, these data may be misleading. Seas were choppy during the survey of the central portion and generally smooth during the survey on the northern and southerly sections of the Grid. It is possible that sea conditions such as encountered in the central section reduce the radius of visibility enough to explain the low numbers recorded. It is well known among field observers that storm petrels are difficult to see in choppy seas (6-8 ft.), but it is not possible to assign a quantitative adjustment factor to these data to account for environment changes.

The high linear density of storm petrels in sector 7 is discussed earlier in the report. In summary of that discussion the recorded density is higher than actual densities due to smooth seas and observations from the skiff. Both factors increased the radius of visibility yielding greater numbers of birds recorded.

Red-billed Tropicbird

Two birds were recorded in sector 9 of the Grid.

Red Phalarope

Sixty-nine percent of the phalaropes were recorded in the northern section of the Grid. Birds were again recorded in the vicinity of slicks believed to be indicative of oceanographic fronts. These slicks were found in the east side of sector 2, as was the case on EGS 11.

The nocturnal abundance of phalaropes in the central section is of interest. On the night of 3 August, after seeing no phalaropes during the day, ca. 25 birds were recorded during 2-1/2 hours of nocturnal observation. The birds are attracted to the ship at night given proper overcast conditions. But on this night the ship was drifting (essentially remaining in one area) and such high numbers are difficult to explain. Do the birds move primarily at night and stay on the water during the day, or is there another explanation?

Jaegers

Parasitic Jaeger	1
Long-tailed Jaeger	1
Jaeger sp.	21

Jaegers were also centered in the northern section of the Grid, where 83 percent of the birds were recorded. Specific identification of these birds remains a problem as they seldom come close to the ship.

<u>Alcids</u>	Xantus Murrelet	1
	Cassin Auklet	2
	Alcid sp.	5

These five birds were recorded in the north and central sectors of the Grid, i.e., sectors 3 and 6.

Sterna sp.

Six unidentified birds were recorded in sectors 3 and 6.

Gull sp.

Four birds were recorded - not to species - in sectors 2 and 3.

Accidentals

Ducks sp.

Twenty-five birds recorded in two flocks in sectors 2 and 5.

<u>Mourning Dove</u>	+ - present	0	0	0
	0 - absent	0	+	+
		0	+	+

Seven Mourning Doves were recorded in sectors indicated above. Collected.

Band-tailed Pigeon

Records - 2 in sectors 5 and 9.

Brown-headed Cowbird

One bird seen each in sectors 4 and 8.

Bullock's Oriole

One bird landed on the main mast on 30 August while in sector 4. It was shot but fell in the water and was lost.

Mammals

Nine hundred thirty-nine mammals recorded in the Grid area (all but two were Cetacea).

Dolphins

This was the most abundant mammal in the Grid area with a total of 677 individuals recorded. One specimen was obtained 27 August at 34°20' N, 126°27' W. Complete measurements and photos were taken of this animal, and the skeleton roughed out and saved.

Great variance in coloration of extremities has been noted during past surveys. During this survey the animals recorded had small amounts of "dirty white" in the dorsal and on the flippers, whereas those seen and photographed on earlier cruises had brilliant white markings. The explanation of the change is believed to be one of two factors: 1) The mammals recorded in the area earlier have moved out of the Grid area, probably north or northwest, and those recorded on this survey were arrivals of another population (probably southern as northerly movements are evident); or 2) The white coloration is a secondary sexual characteristic which is becoming poorly defined in the "nonbreeding seasons." We have had extensive correspondence with Cetalogists on the West Coast and none can offer an explanation to this problem.

Lissodelphus

The appearance of this animal in the northern section of the Grid suggests that the southerly movements of the species are beginning.

Orcinus

A pod of 25⁺ "killers" was seen at 34°53' N, 123°19' W. Loosely associated with this pod were two animals which showed large amounts of albinism. The animals were chased for some time and well-observed. Photos were taken by tug crewmembers and hopefully will be of value.

Whales

Baleen whales still predominated in the area. The concentration of all whales was in the northern section of the Grid area. That the largest of the Balaenoptera are remaining in the area indicates relatively large planktonic concentrations in these northern waters. These large animals would leave unrich waters to seek food were it not abundant here.

Non-Grid

Observations are summarized in Table 8. The presence of large numbers of Sterna just outside the Grid near Point Ash is worthy of mention. All other interpretations are left to the reader if he will refer to Tables.

MARINE MAMMAL OBSERVATIONS - EAC 22
25 August - 5 September 1967

GRID

Identification	#	Latitude	Longitude	Time	Date	Remarks
Dall Porpoise	2	34°57' N	121°27' W	0635	26	Riding Bow
Right Whale Dolphin	150 ⁺	34°59' N	122°17' W	1115	26	Chased (tugs)
Right Whale Dolphin	50 ⁺	34°58' N	122°2' W	1230	26	Same as above ? Chased briefly
Seal sp.	1	34°56' N	122°45' W	1450	26	NE Eared, DK BR, 5'-6' long
Whale	1	34°54' N	123°07' W	1705	26	Humpy-Rel #2 "icecream cone"- 20' showed flukes and lots of back, a good splash too. Close, 1/3 mi. but only glimpsed.
<u>Delphinus</u>	75	34°53' N	123°16' W	1745	26	Chased into sun for 5 min. - did not follow ship; high dorsal, some appeared to have white in dorsal; others ?
<u>Orcinus orca</u>	25 ⁺	34°53' N	123°19' W	1815	26	2 "pure" albino, 1 [2?] mottled albino
Porpoise	25 ⁺	34°53' N	123° 19' W	1815	26	<u>Delphinus</u> ? With killers
Porpoise	20 ⁺	34°53' N	123°31' W	1932	26	Dall or <u>Delphinus</u> not chased. "Throwing themselves bodily thru the H ₂ O."
<u>Delphinus</u>	50 ⁺	34°20' N	126°27' W	1320	27	1 ♂ collected
Porpoise sp.	15 ⁺	34°12' N	126°18' W	1500	27	Glimpsed astern, half twists, may be <u>Delphinus</u> , not chased
<u>Delphinus</u> ?	50 ⁺	34°12' N	125°55' W	1705	27	4 mi. to port <u>Delphinus</u> -acting; not chased
Sperm Whale	1	34°12' N	125°36' W	1857	27	1 animal, many blows
Baleen Whale	1 ⁺	34°14' N	123°25' W	0658	28	W; far to port/Spout seen
Whale sp.	1	34°14' N	123°26' W	0705	28	ca. 4-5 mi. off stbd beam
Porpoise	30 ⁺	34°14' N	123°05' W	0907	28	<u>Delphinus</u> ? Not chased; high dorsal-type with much splashing; running hard
Seal sp.	1	34°13' N	122°57' W	0953	28	Head out of H ₂ O

Identification	#	Latitude	Longitude	Time	Date	Remarks
Baleen Whale				1155	28	60'
<u>Delphinus</u>	30 [±]	34°13' N	122°38' W	1205	28	At least 1 w/white-type dorsal, did not ride bow, chased and fled
Sei.? Whale	2	34°12' N	122°20' W	1615	28	Ident. on basis of large dorsal
Baleen Whale	1	34°11' N	122°02' W	1648	28	No prominent blowhole or dorsal
FIN ? Whale	1	34°11' N	121°56' W	1735	28	3 Blows High, back seen
<u>Delphinus</u>	8	34°11' N	121°46' W	1845	28	Attracted to ship; rode off fantail, not jumping
Sperm Whale	1 ⁺	33°18' N	121°36' N	1323	29	Blow still angular against wind. very low when blowing down wind
Baleen Whale	1	33°17' N	121°48' W	1350	29	2 blows; high columnar, back bit mp dprsa;s seem
SEI (???) Whale	1 ⁺	33°17' N	121°57' W	1445	29	Small columnar blows
Sperm (?) Whale	1	33°16' N	122°03' W	1518	29	blows, being windswept
Baleen Whale	1	33°15' N	122°06' W	1537	29	Blue/SEI ?? No dorsal seen
<u>Delphinus</u>	60 [±]	32°40' N	126°28' W	1845	30	Riding bow wide variation in color patterns (See logs)
<u>Delphinus</u>	9 [±]	31°41' N	121°16' W	1100	1	At least 2 w/white in dorsal; one small animal
<u>Delphinus</u>	60 [±]	31°38' N	125°27' W	1400	2	Chased w/skiff
<u>Delphinus</u> (?)	5 ⁺	31°33' N	125°59' W	1830	2	Distant; not jumping
<u>Delphinus</u>	150 [±]	30°56' N	124°14' W	1320	3	30 came to bow; many had white markings on dorsal - majority w/little white (see log)
<u>Delphinus</u>	20 [±]	30°55' N	123°49' W	1535	3	No white in dorsal
<u>Delphinus</u>	60	30°55' N	123°37' W	1645	3	No white in dorsal; 3 small animals behind
<u>Delphinus</u>	30 [±]	30°54' N	123°29' W	1750	3	
<u>NON-GRID</u>						
<u>Delphinus</u>	4	32°37' N	118°00' W	0700	5	Rode bow for 4 min. 1 w/light in middle of dorsal

TABLE 1. Summary of Diurnal Observations, Eastern Grid Survey 12
26 August - 4 September 1967

	Number	% of Total	Birds/ Linear Mi.	Number Collected	No. Sera Samples
Black-footed Albatross	44	9.9	.046		
Pink-footed Shearwater	2	0.4	.002		
New Zealand Shearwater	1	0.2	.001		
Sooty Shearwater	3	0.6	.003		
Shearwater sp.	3	0.6	.003		
Cook's Petrel	3	0.6	.003	1	1
White-rumped Storm Petrel	94	20.7	.099	10	2
Dark-rumped Storm Petrel	15	3.3	.015		
Storm Petrel sp.	90	19.8	.094		
Shearwater/Petrel	9	2.0	.009		
Red-billed Tropicbird	2	0.4	.002		
Duck sp.	25	5.5	.026		
Semi-palmated Plover	2	0.4	.002		
Pectoral Sandpiper	2	0.4	.002		
Red Phalarope	65	14.3	.068	2	1
Phalarope sp.	16	3.5	.016		
Shorebird sp.	6	1.3	.006		
Parasitic Jaeger	1	0.2	.001		
Long-tailed Jaeger	1	0.2	.001	1	
Jaeger sp.	20	4.4	.021		
Gull sp.	4	0.8	.004		
Sterna sp.	6	1.3	.006		
Xantus Murrelet	1	0.2	.001		
Cassin Auklet	2	0.4	.002		
Alcids	5	1.1	.005		
Mourning Dove	7	1.5	.007	1	
Band-tailed Pigeon	2	0.4	.002	1	
Brown-headed Cowbird	2	0.4	.002	1	
Bullock's Oriole	1	0.2	.001		
Passerine sp.	5	1.1	.005		
Bird sp.	16	3.5	.016		
	454	99.6	0.474	17	4

TABLE 4. Sectional Abundance of Species Groups E.G.S. 12
26 August - 4 September 1967

			E	11
1	2	3		
4	5	6		
7	8	9		

Group	Areas									Total
	1	2	3	4	5	6	7	8	9	
Albatross	4	3	5	7	8	17	5	9	7	68*
Shearwater/Petrel	10	2	2	1	1	-	-	2	1	19
Storm Petrel	13	21	48	9	4	6	52	16	31	198
Tropicbird	-	-	-	-	-	-	-	2	-	2
Phalaropes	5	28	23	-	-	24	1	-	-	81
Jaegers	6	4	5	1	-	1	-	2	3	22
Gull	-	1	3	-	-	-	-	-	-	4
Tern	-	-	1	-	-	5	-	-	-	6
Alcid	-	-	5	-	-	3	-	-	-	8
Misc.	3	19	7	1	13	12	4	5	2	66
										450

* Not adjusted

TABLE 5. Sectional Densities of Species Groups, E.G.S. 12
26 August - 4 September 1967

	Areas									Total
	1	2	3	4	5	6	7	8	9	
Albatross	.035	.035	.059	.060	.070	.175	.047	.080	.055	.046*
Shearwater/Petrel	.088	.024	.023	.009	.009	-	-	.018	.008	.019
Storm Petrel	.114	.243	.563	.078	.035	.062	.485	.141	.244	.206
Tropicbird	-	-	-	-	-	-	-	.018	-	.002
Phalaropes	.043	.325	.270	-	-	.247	.010	-	-	.085
Jaeger	.053	.046	.059	.009	-	.010	-	.018	.024	.023
Gull	-	.011	.035	-	-	-	-	-	-	.004
Tern	-	-	.012	-	-	.052	-	-	-	.006
Alcid	-	-	.060	-	-	.031	-	-	-	.008
Misc.	.026	.223	.082	.009	.113	.123	.036	.046	.016	.069

* Based on total of 44 birds

.470

TABLE 6. North, Central, South Breakdown of E.G.S. 12
26 August - 4 September 1967

Species	Number			Linear density		
	N	C	S	N	C	S
Black-footed Albatross	12	32	24	.042	.098	.070
Pink-footed Shearwater	2	-	-	.007	-	-
New Zealand Shearwater	1	-	-	.004	-	-
Sooty Shearwater	2	1	-	.007	.003	-
Shearwater sp.	1	-	2	.004	-	.006
Cook's Petrel	-	1	2	-	.003	.006
White-rumped Storm Petrel	44	0	41	.155	.027	.119
Dark-rumped Storm Petrel	14	-	1	.049	-	.003
Storm Petrel sp.	24	10	56	.084	.030	.162
Shearwater/Petrel	8	-	1	.028	-	.003
Red-billed Tropicbird	-	-	2	-	-	.006
Duck sp.	17	8	-	.060	.024	-
Semipalmated Plover	-	1	1	-	.003	.003
Pectoral Sandpiper	-	1	-	-	.003	-
Red Phalarope	43	21	1	.151	.064	.003
Phalarope sp.	13	3	-	.045	.000	-
Shorebird sp.	3	1	2	.011	.003	.006
Parasitic Jaeger	-	1	-	-	.003	-
Long-tailed Jaeger	1	-	-	.004	-	-
Jaeger sp.	14	1	5	.049	.003	.014
Gull sp.	4	-	-	.014	-	-
Tern sp.	1	5	-	.004	.015	-
Xantus Murrelet	1	-	-	.004	-	-
Cassins Auklet	2	-	-	.007	-	-
Alcid	2	3	-	.007	.009	-
Mourning Dove	-	5	2	-	.015	.006
Band-tailed Pigeon	-	1	1	-	.003	.003
Brown-headed Cowbird	-	-	1	-	-	.003
Bullock's Oriole	-	1	-	-	.003	-
Passerine sp.	3	-	2	.011	-	.006
Bird sp.	6	7	3	.011	.021	.009
Total	218	111	147	.767	.338	.426

TABLE 7. East, Center, West Breakdown of E.G.S. 12
26 August - 4 September 1967

Species	Number			Linear density		
	W	C	E	W	C	E
Black-footed Albatross	19	20	29	.057	.064	.094
Pink-footed Shearwater	1	1	-	.003	.003	-
New Zealand Shearwater	1	-	-	.003	-	-
Sooty Shearwater	0	1	2	-	.003	.006
Shearwater sp.	1	1	-	.003	.003	-
Cook's Petrel	1	-	-	.003	-	-
White-rumped Storm Petrel	27	16	51	.081	.051	.165
Dark-rumped Storm Petrel	2	7	6	.006	.022	.019
Storm Petrel sp.	44	18	28	.131	.057	.091
Red-billed Tropicbird	-	2	-	-	.006	-
Duck sp.	-	17	-	-	.054	-
Semipalmated Plover	-	2	-	-	.006	-
Pectoral Sandpiper	-	1	-	-	.003	-
Red Phalarope	4	24	37	.012	.076	.120
Phalarope sp.	2	4	10	.006	.013	.032
Shorebird sp.	2	-	4	.006	-	.012
Parasitic Jaeger	1	-	-	.003	-	-
Long-tailed Jaeger	-	1	-	-	.003	-
Jaeger sp.	6	5	9	.018	.016	.029
Gull sp.	-	1	3	-	.003	.010
Tern sp.	-	-	6	-	-	.019
Xantus Murrelet	-	-	1	-	-	.003
Cassin Auklet	-	-	2	-	-	.006
Alcid	-	-	5	-	-	.016
Mourning Dove	-	1	5	-	.003	.016
Band-tailed Pigeon	-	1	1	-	.003	.003
Brown-banded Cowbird	1	1	-	-	.003	.003
Bullock's Oriole	-	1	-	-	.003	-
Passerine sp.	2	1	2	.006	.003	.006
Bird sp.	4	3	9	.012	.010	.029
Total	126	131	211	.377	.417	.683

TABLE 8. Summary of Non-Grid Observations, EAC 22, 25 August-5 September 1967

	Vicinity				Total
	L.B.-Anacapa	Pt. Ash	Pt. Oak	Arrive S.D.	
	0850-1400Z	0633-0922	0945-1740	0648-0945	
	25 Aug.	26 Aug.	5 Sept.	5 Sept.	
Black-footed Albatross		1		2	3
Sooty Shearwater		6		2	8
Pink-footed Shearwater	10			4	14
Shearwater sp.				4	4
Total Shearwater					26
White-rumped Storm Petrel		9	4		13
Dark-rumped Storm Petrel			1		1
Storm Petrel sp.		13	3		16
Total Storm Petrel					30
Br. Pelican	9			12	21
Cormorant sp.	1				1
Duck sp.				4	4
Red Phalarope	2				2
Northern Phalarope	15	5		13 (many close to S.D.)	33
Phalarope sp.	110 (North.)	4		1	115
Total Phalarope					150
Shorebird sp.		10			10
Jaeger sp.	2	6	1	1	10
Western Gull	11			78	89
Herring Gull	1				1
Heermans' Gull	1				1
Sabine Gull	2				2
Gull sp.	32				32
Total Gull					125
<u>Sterna</u> sp.		22			22
Alcid sp.		2			2
Mourning Dove			1	14	15
Passerine		1 (Cowbird)		8	9
Bird sp.		5	3	2	10
Total Bird	196	84	13	145	438
# Miles	56	38	55	46	195
# Species	10	8	3	11	17
# Hours	5.2	2.8	6.2	3.0	17.2

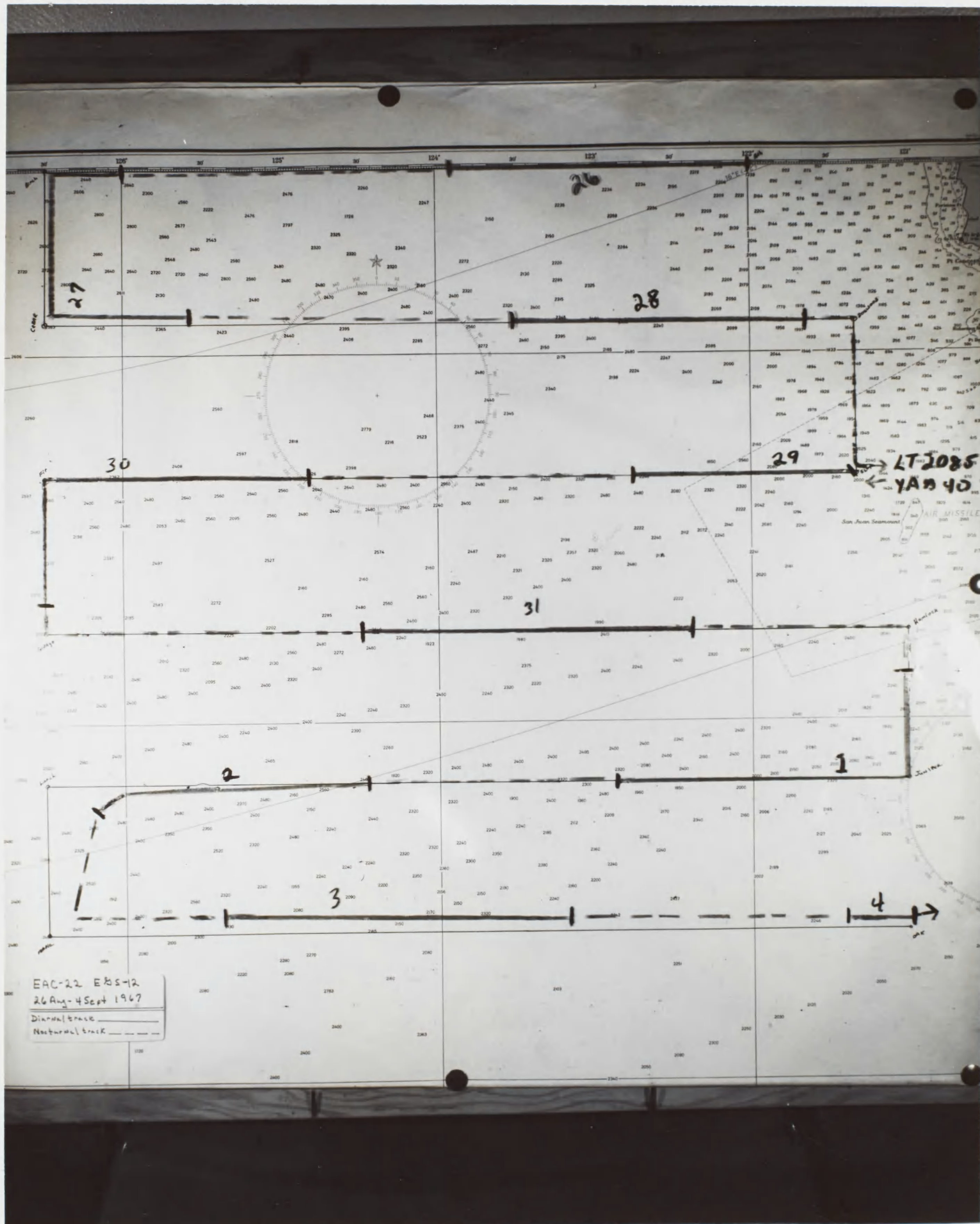


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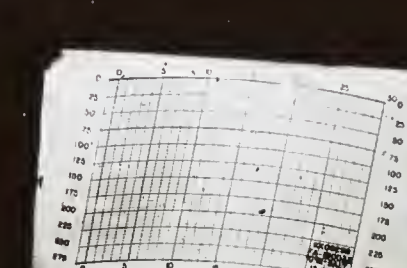
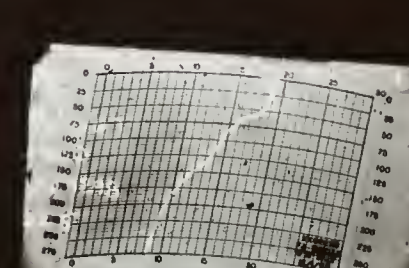
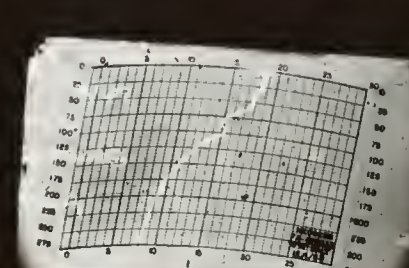
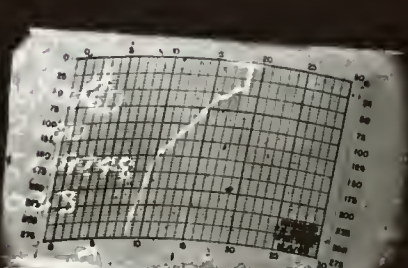
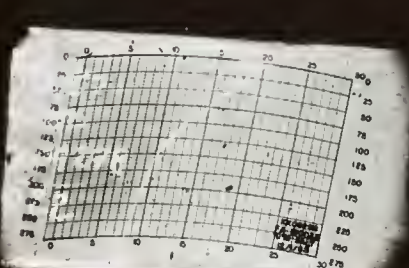
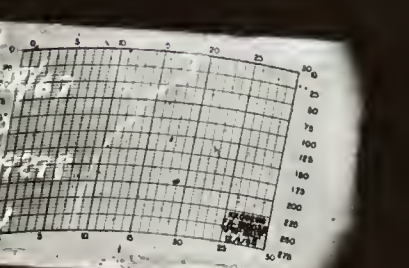
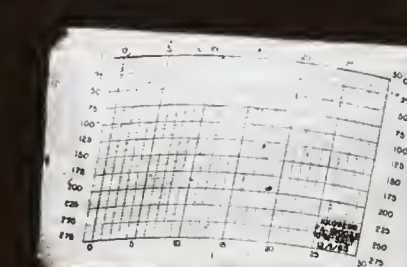
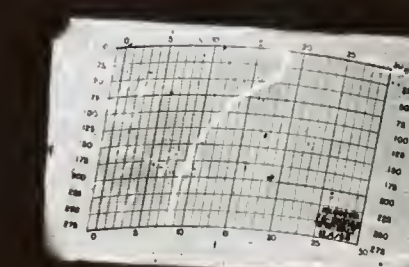
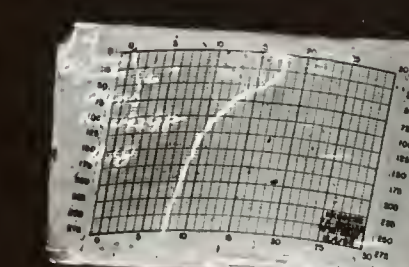
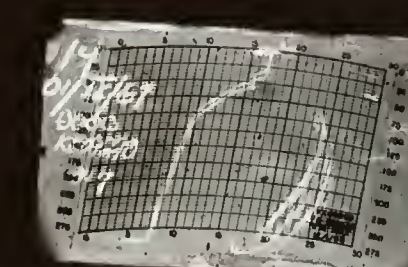
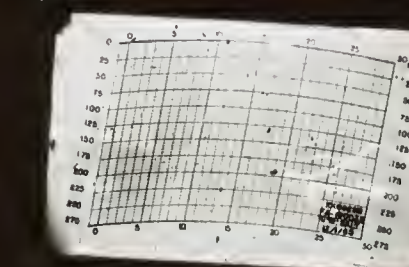
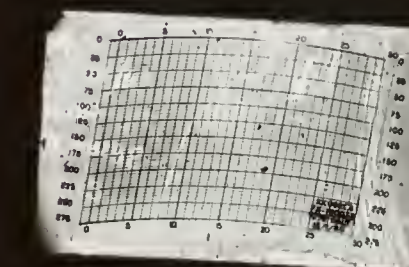
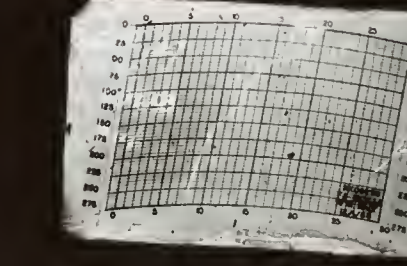
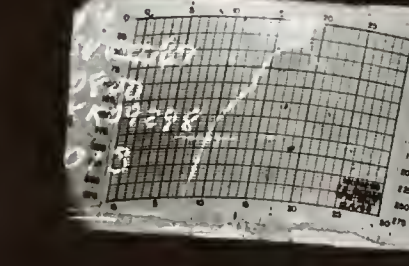
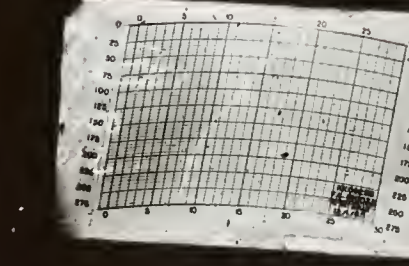
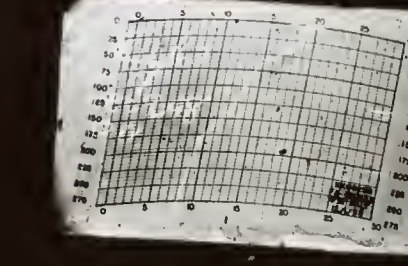
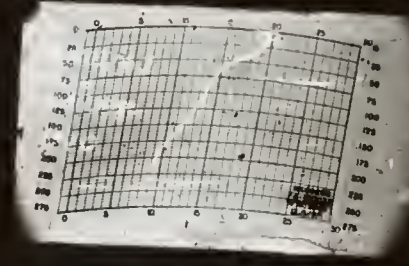
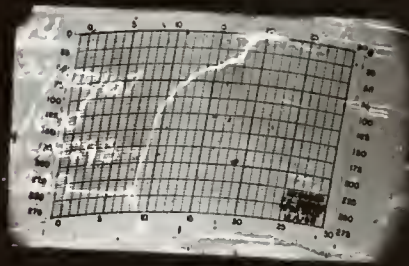
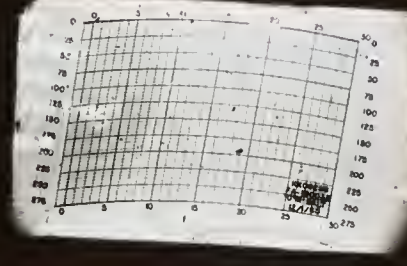
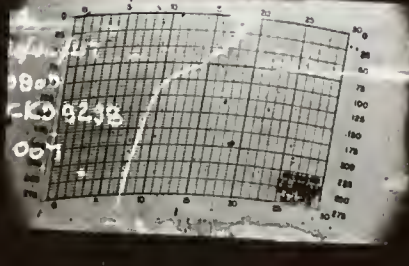
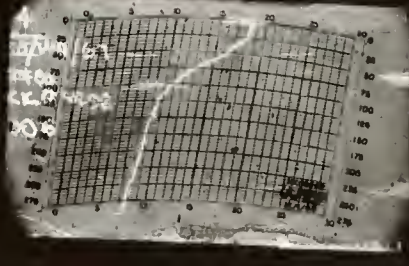
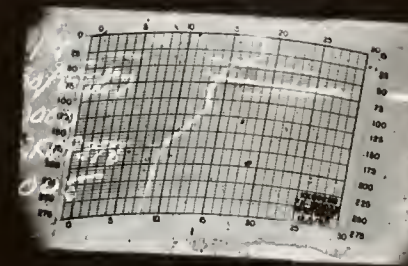
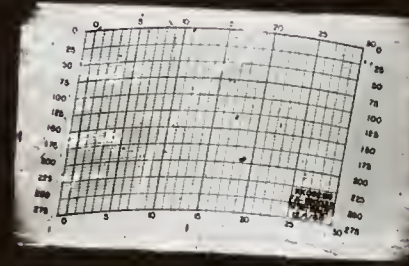
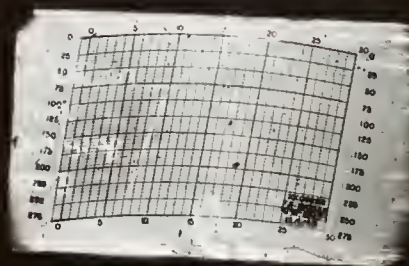
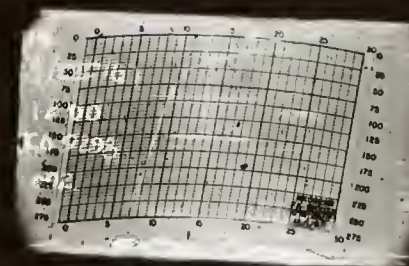
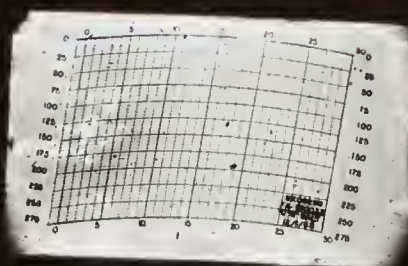
EAC 22 FBS 12 002-14

29 Aug - 2 Sept 1967

BT slides

01-26

Figure 3 (1)



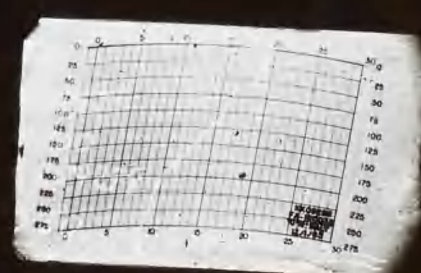
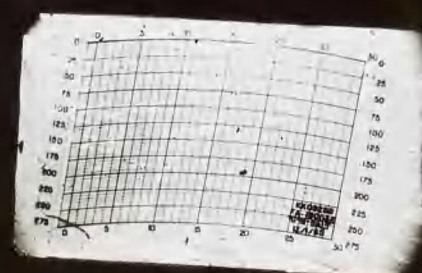
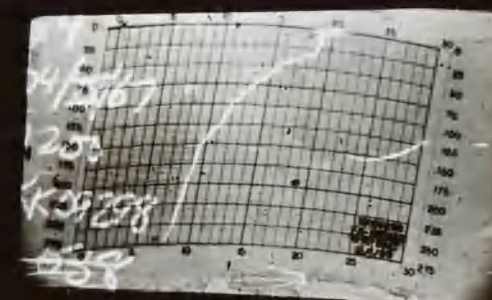
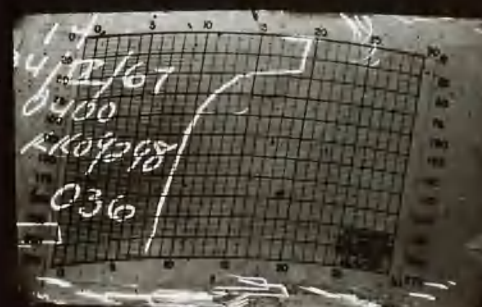
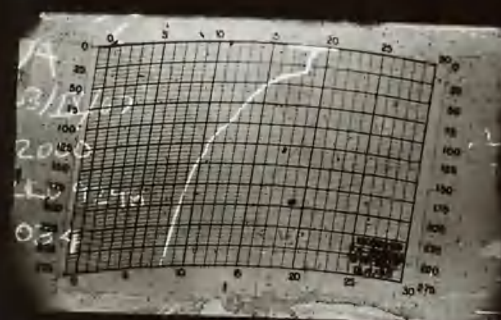
EAC 22 EDS 12 002-14

02-04 Sept 1967

B-T slides

27-38

Figure 3(2)



→ 34

→ 35

→ 36

→ 37

→ 38A

→ 39

→ 39A

→ 40

→ 40A

→ 41

→ 41A

Date 22-23 Aug Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

- 1.
- 2.
- 3.
- 4.
- 5.

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt. Bar

0100	22 04	160 55	262	3 KNT	080	2-4 FT	30.00
0200	22 07	161 08	262	3 KNT	080	2-4 FT	30.00
0300	22 10	161 19	260	3 KNT	080	2-4 FT	29.98
0400	22 12.5N	161 31.5W	260	12 KT	067	2-4 FT	29.96
0500	22 16N	161 42W	250	12 KTS	073	2-4	29.96
0600	22 18N	162 02W	250	12 KT	083	2-4 FT	29.98
23 AUG 0700	22 17N	162 13W	245	13 KT	083	2-4 FT	29.98
0800	22 18N	162 21W	140	10 KT	065	2-4 FT	30.00
0900	22 25N	162 37.5	050	10 KT	050	2-4 FT	30.00
1000	22 27N	162 55	050	10 KT	050	3-5 FT	30.00
1100	22 30N	162 05	056	8 KT	055	3-5 FT	30.00
1200	22 37.5	163 14.5	283	8 KNTS	090	1-2 FT	30.02
1300							
1400	21-22.0N	158-50.2W	340°	4 KNTS	235°	1-2 FT	29.90 in
1500	21-20N	158-50W	340	4 KNTS	235°	2-4 FT	29.93 in
1600	21-26.1N	159°16W	323	17 KT	070	2-4 FT	29.90
22 AUG 1700	21° 29.2N	159° 26.2W	330	19 KT	065	2-4 FT	29.89
1800	21° 32.5N	159° 39'W	320	18 KT	073	4-6 FT	29.90
1900	21° 32.6N	159° 49'W	330	18 AT	070	4-6 FT	29.91
2000	21 35.8N	160-05.8W	025	8 KT	025	4-6 FT	29.92
2100	21-40.8	160-13W	050	10 KT	050	3-5 FT	29.95
2200	21-40.8	160-21W	030	10 KT	050	4-6 FT	29.95
2300	21-59	160-31.8	320	5 KT	320	4-7 FT	29.98
2400	21-58.5	160-43	030°	3 KT	040	4-5 FT	30.00

Date 25 Aug Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	
0100	22-04	160-55	262	3 KTS	080	2-4 FT	3000
0200	22-07	161-08	262	3 "	080	2-4 "	3000
0300	22-10	161-19	260	3 "	080	2-4 "	2998
0400	22-12.5	161-31.5	260	12 "	067	2-4 "	2996
0500	22-16	161-42	250	12 "	073	2-4 "	2996
0600	22-15	162-02	250	12 "	083	2-4 "	2998
0700	22-17	162-13	245	13 "	083	2-4 "	2998
0800	22-18 ²⁰	162-27 ²⁵	140	10 "	065	2-4 "	3000
0900	22-25 ²⁴	162-37.5	280	10 "	050	2-4 "	3000
1000	22-27	162-55 ⁵⁰	280	10 "	050	3-5 "	3000
1100	22-30	163-05 ⁰²	285	8 "	055	3-5 "	3000
1200	22-37.5	163-14.5	283	8 "	040	1-2 "	3002
1300	22-41	163-25 ⁰	297°	6 KTS	080	2-4 FT	30.00"
1400	22-45	163-40 ⁰⁰	297	6 KTS	080	2-4 FT	29.99
1500	22-49	163-53	303°	4 KTS	055	4-6 FT	29.99
1600	22-52	164-05	290	7 KT.	050	4-6 FT	29.98
1700	22-56	164-18	280	12 KT	063	4-8 FT	29.98
1800	22-59	164-30.5	290	12 KT	067	4-6 FT	29.98
1900	23-03	164-35 ^W	290	12 KT	065	4-6 FT	30.00
2000	23-06	164-49 ^W	018	6 KT	070	2-4 FT	30.00
2100	23-12	165-10 ^W	100	8 KT	020	2-4 FT	30.00
2200	23-15.5	165-23 ^W	120	8 KT	120	2-4 FT	30.03
2300	23-18	165-35 ^W	110	8 KT	110	2-4 FT	30.03
2400	23-22	165-48 ^W	306	4 KTS	110	1-2 FT	30.04

BAK

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	
0100	22-04	160-55	262	3 KTS	080	2-4 FT	3000
0200	22-07	161-08	262	3 "	080	2-4 "	3000
0300	22-10	161-19	260	3 "	080	2-4 "	2998
0400	22-12.5	161-31.5	260	12 "	067	2-4 "	2996
0500	22-16	161-42	250	12 "	073	2-4 "	2996
0600	22-15	162-02	250	12 "	083	2-4 "	2998
0700	22-17	162-13	245	13 "	083	2-4 "	2998
0800	22-18 ²⁰	162-27 ²⁵	140	10 "	065	2-4 "	3000
0900	22-25 ²⁴	162-37.5	280	10 "	050	2-4 "	3000
1000	22-27	162-55 ⁵⁰	280	10 "	050	3-5 "	3000
1100	22-30	163-05 ⁰²	285	8 "	055	3-5 "	3000
1200	22-37.5	163-14.5	283	8 "	040	1-2 "	3002
1300	22-41	163-25 ⁰	297°	6 KTS	080	2-4 FT	30.00"
1400	22-45	163-40 ⁰⁰	297	6 KTS	080	2-4 FT	29.99
1500	22-49	163-53	303°	4 KTS	055	4-6 FT	29.99
1600	22-52	164-05	290	7 KT.	050	4-6 FT	29.98
1700	22-56	164-18	280	12 KT	063	4-8 FT	29.98
1800	22-59	164-30.5	290	12 KT	067	4-6 FT	29.98
1900	23-03	164-35 ^W	290	12 KT	065	4-6 FT	30.00
2000	23-06	164-49 ^W	018	6 KT	070	2-4 FT	30.00
2100	23-12	165-10 ^W	100	8 KT	020	2-4 FT	30.00
2200	23-15.5	165-23 ^W	120	8 KT	120	2-4 FT	30.03
2300	23-18	165-35 ^W	110	8 KT	110	2-4 FT	30.03
2400	23-22	165-48 ^W	306	4 KTS	110	1-2 FT	30.04

Date Aug 24 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	
0100	22-24	165-50	322	6	110	1-2 FT	30.04"
0200	23-29	166-07	321	6	110	1-2 FT	30.02"
0300	23-32	166-20	330	7	110	1-2 FT	30.02"
0400	23 35	166 33	320	8	100	2-4 FT	30.00
0500	23 40	166 44	330	8	120	2-4 FT	30.00
0600	23 44	166 56	340	8	120	2-4 FT	30.02
0700	23 50	167 09	340	8	126	2-4 FT	30.04
0800	23 55	167-21	100	8	120	2-4 FT	30.05
0900	23 59.9	167-33	100	5	110	1-3 FT	30.06
1000	24 04.5	167-45	100	10	110	1-3 FT	30.08
1100	24 09.5	167-56.4	100	8	100	1-3 FT	30.08
1200	24-14.5	168-09	025	5	025	1-3 FT	30.06
1300	24-18.5	168-20.3	025	5	025	1-3 FT	30.06
1400	24-23.5	168-31.3	025	8	025	1-3 FT	30.05
1500	24-27.8	168-44.3	025	8	025	1-3 FT	30.05
1600	24-32.5	168-56	345	5	040	1-4 FT	30.03"
1700	24-36.5	169-08	245	5	040	1-4 FT	30.05"
1800	24-41.5	169-20	013	5	045	1-3 FT	30.03"
1900	24-46	169-32	253	14	045	1-3 FT	30.03
2000	24 51	169 47	250	14	045	2-4 FT	30.04
2100	24 56	170 00	260	14	050	2-4 FT	30.06
2200	25 00	170 13	255	13	040	2-4 FT	30.08
2300	25 05	170 25	260	12	040	2-4 FT	30.10
2400	25 30.5	170 37	255	15	040		30.10

Date 25 Aug 67 Ship () Cruise No.
Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions: 25 AUGUST 1967

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
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0100	25 07.5	170-51	080	17 KT	070	2-4 FT	BAR. 30.10
0200	25 07.5	171-04.5	080	15 KT	075	2-4 FT	30.10
0300	25-16	171-15.6	090	14 KT	070	1-3 FT	30.08
0400	25-29	171-26	104	16 KT	104	1-3 FT	30.08
0500	25-33.2	171-37.5	100	14 KT	100	1-3 FT	30.08
0600	25-37.8	171-50	100	14 KT	100	1-3 FT	30.08
0700	25-39	171-43					
0800	25-44	171-55					
0900	25-49.5	172-06	087	15.5 KT	037	1-3 FT	30.12
1000	25-54	172-18	089	16.0 KT	037	1-3 FT	30.12
1100	25-59	172-30	089	16.0 KT	037	1-3 FT	30.13
1200	26-05	172-41.5	090	17 KT	039	1-3 FT	30.12
1300	26 10	172-52.5	085	17	040	1-3 FT	30.14
1400	26 15.2	173-04.5	085	14	040	1-3 FT	30.13
1500	26 20.2	173-16.8	090	14	037	1-3 FT	30.12
1600	26 25	173-27	075	17 KT	030	1-3 FT	30.12
1700	26 30	173-37.5	075	16 KT	030	1-3 FT	30.10
1800	26 30.5	173-49.8	065	17.5 KT	020	1-3 FT	30.10
1900	26 40.8	174-02	072	15.5 KT	025	1-3 FT	30.10
2000	26-45.5	174-13	080	15.5	086	1-3 FT	30.12
2100	26-57	174-25	086	15.5	086	3-6 FT	30.12
2200	26-54	174-43	084	22	084	3-6 FT	30.13
2300	27-01	174-54	067	15	090	1-2 FT	30.13
2400	27-03.5	175-00	069	14	090	1-3 FT	30.16

Date 26 Aug 67 Ship () Cruise No.
Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

Hourly Positions: 26 Aug 67

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
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Bar

0100	27-09	175-12	084	17 KT	010	1-2 FT
0200	27-15	175-23	084	17 KT	010	1-4 FT
0300	27-20	175-25	084	17 KT	010	1-4 FT
0400	27 26.5	175 46.1	090	14 KT	031	1-3 FT
0500	27 32	176 02.1	083	18 KT	021	1-3 FT
0600	27 37	176 09	091	18 KT	030	1-3 FT
0700	27 42	176 19.3	090	18 KT	027	1-3 FT
0800	27 48	176 36	085	16 KT	030	1-3 FT
0900	27 55.5	176 49.2	074	17 KT	035	1-3 FT
1000	28 00.5	176 59.5	070	17 KT	030	1-3 FT
1100	28 06	177 11.5	073	16 KT	030	1-3 FT
1200	28 09	177 14	082	13 KT	290	4-5 FT
1300	28-01	176 51	087	13 KT	290	4-7 FT
1400	28-07	176-39	082	13 KT	290	4-7 FT
1500	27-53	176-28	082	13 KT	290	4-7 FT
1600	27 57.2	176-22.1	085	12 KT	295	4-7 FT
1700	27 48	176-22.0	093	14 KT	290	4-7 FT
1800	27 45	176 01	090	15 KT	290	4-7 FT
1900						
2000						
2100						
2200						
2300						
2400						

Date 28 Aug Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100	27 46N	175 49W	085	12 KTS		30.12
0200			090	10 KTS		30.09
0300			070	10 KTS		30.08
0400			040	12 KTS		30.08
0500			065	12 KT		30.07
0600			075	12 KT		30.07
0700			080	10 KT		30.08
0800			080	14 KT		30.08
0900			075	10 KT		30.05
1000			075	10 KT		30.05
1100			080	10 KT		30.04
1200			075	10 KT		31.08
1300			065	10 KT		31.03
1400			065	10 KT		31. -
1500			080	10 KT		31. -
1600			050	8 KT		30.08
1700			065	8 KTS		30.06
1800			070	9 KTS		30.04
1900			080	3 KTS		30.02
2000			085	4 KTS		30.02
2100			080	10 KTS	-	30.03
2200			085	10 KTS	-	30.04
2300			070	10 KTS	-	30.03
2400	27 46	175 49W	085	11 KTS		30.12

332
102
253

102
253

Date 30 AUG Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	BAR
------	----------	-----------	-----------	----------	-----------	-----------	-----

0100	27-47	175-49	093	10 KT	110	1-3 FT	30.07
0200	"	"	100	10 KT	110	1-3 FT	30.07
0300	"	"	075	8 KT	105	1-3 FT	30.05
0400			095	10 KT	-	-	30.05
0500			090	10 KT	-	-	30.05
0600			080	10 KTS	-	-	30.03
0700			090	10 KTS	-	-	30.03
0800			100	10 KTS			30.04
0900			100	10 KTS			30.06
1000			100	5 KTS			30.07
1100			100	5 KTS			30.08
1200			090	8 KT.			30.08
1300			095	5 KT.	120	1-3 FT	30.08
1400			095	9 KT.	125	1-3 FT	30.06
1500	27-41	175-47	264	26 KT.	095	1-3 FT	30.03
1600	27-34	175-45	348	24 KT	080	1-3 FT	30.02
1700	27-27	175-36	348	24 KT	080	1-3 FT	30.02
1800	27-20	175-30	309	7.5	090	1-2 FT	30.00
1900	27-16	175-23	312	7.5	090	1-2 FT	30.02
2000	27-47	175-49	070	10 KT	-	-	30.07
2100	"	"	080	10 KT	-	-	30.07
2200	"	"	070	10 KT	-	-	30.07
2300	"	"	093	9 KT	-	-	30.08
2400	"	"	093	9 KT	110	1-3 FT	30.08

Date 30 Aug Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
--	-------------	-------------	----------	-----------

1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100						
0200						
0300						
0400						
0500						
0600						
0700						
0800						
0900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000	27-11	175-16	312	8	090	12 FT.
2100	27-08	175-11	320	9	080	12 FT.
2200	27-04	175-08	310	9	093	1-3 FT.
2300	26-58	175-00	290	8	087	1-3 FT.
2400	26-54.2	174-53	320	24	120	3-5 FT.

30:04
30:04
30:04
30:04
30:03

Date 31 Aug. '67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	BAR.
0100	26-47.5	174-47	268	17 KT	120	1-3 FT	30.03
0200	26-43	174-41	270	16 KT	115	1-3 FT	30.03
0300	26-39	174-36.5	262	14 KT	090	1-3 FT	30.04
0400	26-34	174-31	078	8 KT	110	1-3 FT	30.05
0500	26-29	174-24.8	078	8 KT	110	1-3 FT	30.05
0600	26-24.5	174-19	078	8 KT	110	1-3 FT	30.04
0700	26-19.3	174-13.2	078	8 KT	110	1-3 FT	30.03
0800	26-16.5	174-18	067	12 KT	110	1-3 FT	30.05
0900	26-10	174-08	067	12 KT	110	1-3 FT	30.05
1000			083	10 KTS			30.06
1100			091	11 KTS			30.07
1200	ANCHORED	LISIANSKI	100	11 KTS			30.08
1300			100	10 KTS			30.06
1400			085	10 KTS			30.05
1500			090	10 KTS			30.04
1600			095	12 KTS			30.01
1700			110	12 KTS			30.01
1800							
1900							
2000			110	10 KTS	070	1-3 FT	30.06
2100			100	10 KTS	070	1-3 FT	30.08
2200			100	10 KTS	070	1-3 FT	30.09
2300			060	10 KTS	070	1-3 FT	30.10
2400			108	10 KTS	070	1-3 FT	30.10

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	BAR.
0100	26-47.5	174-47	268	17 KT	120	1-3 FT	30.03
0200	26-43	174-41	270	16 KT	115	1-3 FT	30.03
0300	26-39	174-36.5	262	14 KT	090	1-3 FT	30.04
0400	26-34	174-31	078	8 KT	110	1-3 FT	30.05
0500	26-29	174-24.8	078	8 KT	110	1-3 FT	30.05
0600	26-24.5	174-19	078	8 KT	110	1-3 FT	30.04
0700	26-19.3	174-13.2	078	8 KT	110	1-3 FT	30.03
0800	26-16.5	174-18	067	12 KT	110	1-3 FT	30.05
0900	26-10	174-08	067	12 KT	110	1-3 FT	30.05
1000			083	10 KTS			30.06
1100			091	11 KTS			30.07
1200	ANCHORED	LISIANSKI	100	11 KTS			30.08
1300			100	10 KTS			30.06
1400			085	10 KTS			30.05
1500			090	10 KTS			30.04
1600			095	12 KTS			30.01
1700			110	12 KTS			30.01
1800							
1900							
2000			110	10 KTS	070	1-3 FT	30.06
2100			100	10 KTS	070	1-3 FT	30.08
2200			100	10 KTS	070	1-3 FT	30.09
2300			060	10 KTS	070	1-3 FT	30.10
2400			108	10 KTS	070	1-3 FT	30.10

Date 1 SEPT 67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

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Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Bar
0100	ANCHORED	LIZIANSKI	123	10 KTS	080	2-4 FT	30.08
0200			065	12 KTS	080	2-4 FT	30.06
0300			077	12 KTS	080	2-4 FT	30.06
0400			080	15 KTS	080	2-4 FT	30.04
0500			065	16 KTS	080	2-4 FT	30.02
0600			120	12 KTS	090	2-4 FT	30.00
0700			125	12 KTS	085	1-3 FT	30.00
0800			005	16 KTS	070	1-3 FT	30.02
0900			070	14 KTS	080	1-3 FT	30.05
1000			075	15 KTS	080	1-3 FT	30.03
1100			075	16 KTS	070	1-3 FT	30.05
1200			075	12 KTS	080	1-3 FT	30.05
1300			105	14 KTS	085	1-3 FT	30.06
1400			050	16 KTS	085	1-3 FT	30.04
1500			065	8 KTS	095	1-3 FT	30.00
1600			083	8 KTS	090	1-3 FT	30.00
1700			081	12 KTS	080	1-3 FT	29.98
1800			111	10 KTS	080	1-3 FT	30.00
1900			118	10 KTS	080	1-3 FT	30.00
2000			110	9 KTS	080	1-3 FT	30.02
2100			100	10 KTS	085	1-3 FT	30.03
2200			105	10 KTS	089	1-3 FT	30.05
2300			101	10 FT	090	1-3 FT	30.06
2400			100	14 KTS	090	1-3 FT	30.08

Date 2 SEPT 67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

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Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	BAR.
ANCHORED LISIANSKI IS							
0100	26-05	173-57	100	15 KTS	085	1-3 FT	30.08
0200			095	14 KTS	105	1-3 FT	30.08
0300			090	12 KTS	90	1-3 FT	30.05
0400			085	12 KTS	075	1-3 FT	30.05
0500			075	14 KTS	075	1-3 FT	30.06
0600			100	14 KTS	080	1-3 FT	30.07
0700			090	14 KTS	080	1-3 FT	30.07
0800			080	15 KTS	070	1-3 FT	30.08
0900			088	15 KTS	073	2-4 FT	30.11
1000			096	12	075	2-4 FT	30.12
1100			090	12	075	2-5 FT	30.12
1200				16			
1300				16	070	2-4 FT	
1400							
1500							
1600			075	16	080	2-4 FT	30.09
1700			080	16	070	2 FT	30.06
1800			075	16	075	2-4 FT	30.06
1900			080	16	075	2-4 FT	30.08
2000			080	16	080	2-4 FT	30.08
2100			095	16	080	2-5 FT	30.08
2200			090	16	080	2-5 FT	30.08
2300			092	16	080	2-5 FT	30.10
2400			095	16	080	2-4 FT	30.08

Date 3-SEPT-67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

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Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
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ANCHORED LISIANSKI I. BHR

0100	<u>26-05N</u>	<u>173-57W</u>	<u>100</u>	<u>16KTS</u>	<u>080</u>	<u>1-3 FT</u> <u>30:10</u>
0200			<u>095</u>	<u>15KTS</u>	<u>085</u>	<u>2-4 FT</u> <u>30:09</u>
0300			<u>100</u>	<u>15KT</u>	<u>070</u>	<u>2-4 FT</u> <u>30:07</u>
0400			<u>100</u>	<u>17KTS</u>	<u>080</u>	<u>2-4 FT</u> <u>30:06</u>
0500			<u>090</u>	<u>15KTS</u>	<u>085</u>	<u>2-4 FT</u> <u>30:07</u>
0600			<u>090</u>	<u>15KTS</u>	<u>085</u>	<u>2-4 FT</u> <u>30:04</u>
0700			<u>110</u>	<u>12KTS</u>	<u>080</u>	<u>1-3 FT</u> <u>30:06</u>
0800			<u>100</u>	<u>14KTS</u>	<u>070</u>	<u>1-3 FT</u> <u>30:08</u>
0900			<u>035</u>	<u>14KTS</u>	<u>070</u>	<u>1-3 FT</u> <u>31-</u>
1000			<u>035</u>	<u>10KTS</u>	<u>070</u>	<u>1-3 FT</u> <u>31-</u>
1100			<u>017</u>	<u>12KTS</u>	<u>070</u>	<u>1-2 FT</u> <u>31-</u>
1200			<u>042</u>	<u>12KTS</u>	<u>070</u>	<u>1-3 FT</u> <u>30:06</u>
1300			<u>040</u>	<u>10</u>	<u>075</u>	<u>1-2 FT</u> <u>30:06</u>
1400			<u>040</u>	<u>10</u>	<u>075</u>	<u>1-2 FT</u> <u>30:04</u>
1500			<u>050</u>	<u>10</u>	<u>075</u>	<u>1-2 FT</u> <u>30:06</u>
1600			<u>080</u>	<u>10</u>	<u>070</u>	<u>1-2 FT</u> <u>30:04</u>
1700			<u>090</u>	<u>10 KTS</u>	<u>085</u>	<u>1-2 FT</u> <u>30:01</u>
1800			<u>100</u>	<u>10 KTS</u>	<u>075</u>	<u>1-2 FT</u> <u>30:00</u>
1900			<u>090</u>	<u>12 KTS</u>	<u>075</u>	<u>1-2 FT</u> <u>30:01</u>
2000			<u>090</u>	<u>12 KTS</u>	<u>080</u>	<u>1-2 FT</u> <u>30:03</u>
2100			<u>090</u>	<u>15 KTS</u>	<u>070</u>	<u>1-2 FT</u> <u>30:03</u>
2200			<u>085</u>	<u>16 KTS</u>	<u>080</u>	<u>1-3 FT</u> <u>30:05</u>
2300			<u>085</u>	<u>15 KTS</u>	<u>065</u>	<u>1-3 FT</u> <u>30:07</u>
2400			<u>085</u>	<u>12 KTS</u>	<u>070</u>	<u>1-3 FT</u> <u>30:07</u>

Date 4 SEPT 67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

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Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
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0100	26-04	176-57	085	16 KTS	065	3-6 FT	3006
0200			085	18	065	3-6 FT	3006
0300			076	18	075	3-6 FT	3003
0400			080	19	070	3-6 FT	3004
0500			085	14	070	3-6 FT	3002
0600			085	14	070	3-6 FT	3002
0700			090	16	080	3-6 FT	3002
0800			065	14	085	3-6 FT	3000
0900			070	16	080	3-6 FT	3000
1000			080	16	090	3-6 FT	3000
1100			085	12	090	3-6 FT	3001
1200			068	12	090	3-6 FT	3001
1300			075	12	085	3-6 FT	3001
1400			075	14	075	3-6 FT	3000
1500			070	14	075	3-6 FT	3000
1600			070	14	065	3-6 FT	2998
1700			070	14	070	3-6 FT	2998
1800			075	14	070	3-6 FT	2998
1900			074	14	070	3-6 FT	2997
2000			088	14	090	3-6 FT	2997
2100			093	16	090	4-6 FT	2997
2200			103	8	090	4-6 FT	2998
2300			097	10	085	2-4 FT	2998
2400			095	10	080	2-4 FT	3003

Date 5 SEPT 67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
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0100	26-04	173-57	100	12 KTS	070	2-3 FT	3000
0200			093	5 KTS	080	2-3 FT	3000
0300			090	5 KTS	079	2-3 FT	3010
0400			085	10 KTS	080	2-3 FT	2998
0500			085	10 KTS	080	2-3 FT	2998
0600			090	10 KTS	075	2-3 FT	2997
0700			100	9 KTS	085	2-3 FT	2996
0800			099	7 KTS	090	2-3 FT	3001
0900	26-03.7	173-41.5	099	7 KTS	080	1-3 FT	3002
1000	26-02.3	173-30.2	099	9 KTS	090	1-3 FT	3003
1100	26-01.8	173-17	099	11 KTS	110	1-3 FT	3003
1200	26-01	173-02.6	099	11 KTS	090	2-4 FT	3003
1300	25-58	172-50	100	9 KTS	090	2-4 FT	3003
1400	25-56	172-37	100	5 KTS	090	2-6 FT	3001
1500	25-54	172-25	100	4 KTS	085	4-6 FT	3000
1600	25-53	172-12	100	5 KTS	080	4-6 FT	2999
1700	25-51	172-00	100	6 KTS	080	4-6 FT	2999
1800			100	10 KTS	080	2-3 FT	2997
1900			105	5 KTS	SEAS CALM		3003
2000			105	6 KTS	CALM		3006
2100			100	10 KTS	CALM		3007
2200			090	8 KTS	CALM		3008
2300			090	8 KTS	"		3008
2400			098	10 KTS	"		3009

Date 6 SEPT 67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
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0100	LAYSAN	ISLAND	095	10 KTS	CALM	—	3009
0200			100	12 KTS	"	—	3008
0300			093	10 KTS	"	—	3006
0400			080	8 KTS	"	—	3005
0500			090	10 KTS	"	—	3005
0600			100	10 KTS	"	—	3006
0700			095	6 KTS	"	—	3008
0800			095	7 KTS	"	—	3008
0900			090	10 KTS	"	—	3008
1000			085	10 KTS	100	1-2 FT.	3008
1100			090	10 KTS	090	CALM - 1 FT.	3009
1200			105	10 KTS	120	" - 1 FT.	3009
1300			115	10 KTS	105	" - 1 FT.	3009
1400			110	10 KTS	105	" - 1 FT.	3009
1500			105	10 KTS	105	" - 1 FT.	3007
1600			100	10 KTS	100	CALM	3008
1700			100	10 KTS	—	CALM	3006
1800			100	10 KTS	—	CALM	3006
1900			100	14 KTS	—	CALM	3006
2000			100	12 KTS	—	CALM	3006
2100			105	10 KTS	—	CALM	3006
2200			105	18 KT	—	CALM	3008
2300			100	12 KT	—	CALM	3010
2400			100	13 KT	—	CALM	3010

Date 7 SEPT. 67 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

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Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
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0100	LAYSAN ISLAND		110	15 KTS	090	1-2 FT.	30.08
0200	25-46 N	170-41.5	115	17 KTS	080	1-2 FT.	30.08
0300			100	13 KTS	075	Calm-1 FT	30.08
0400			105	12 KTS	080	1-2 FT	30.07
0500			105	14 KTS	085	1-2 FT	30.07
0600			095	14 KTS	085	1-2 FT	30.07
0700			090	13 KTS	085	1-2 FT	30.07
0800			100	14 KTS	100	1-2 FT	30.10
0900			100	15 KTS	100	1-2 FT	30.10
1000			105	10 KTS	100	1-2 FT	30.10
1100			105	17 KTS	100	1-2 FT	30.11
1200			105	14 KTS	095	1-2 FT	30.09
1300			100	16 KTS	095	1-2 FT	30.09
1400			095	16 KTS	085	1-2 FT	30.08
1500			100	16 KTS	085	1-2 FT	30.08
1600			090	18 KTS	085	1-2 FT	30.07
1700			100	18 KTS	095	1-2 FT	30.05
1800			090	18 KTS	090	1-2 FT	30.05
1900			085	16 KTS	085	1-2 FT	30.05
2000			115	18 KTS	090	1-2 FT	30.06
2100			107	13 KTS	085	1-2 FT	30.08
2200			115	14 KTS	085	1-2 FT	30.10
2300			112	14 KTS	085	1-2 FT	30.10
2400			110	14 KTS	085	1-2 FT	30.10

Date 8 Sept 67 Ship 152087 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

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Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	BAROMETER
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0100	LAYSAN	15440	145	16 KT	—	CALM	30.07
0200			140	16 KTS	—	CALM	30.08
0300			145	8 KTS	—	CALM	30.08
0400			147	2 KTS	—	CALM	30.08
0500			150	11 KTS	—	CALM	30.07
0600			140	10 KTS	—	CALM	30.06
0700			150	9 KTS	—	CALM	30.05
0800			110	14 KTS	—	CALM	30.05
0900			160	16 KTS	—	1-2 FT	30.05
1000			140	14 KTS	—	1-2 FT	30.04
1100			120	16 KTS	—	1-2 FT	30.08
1200			115	16 KTS	100	1-2 FT	30.06
1300			120	18	—	less than 1'	30.04
1400			120	18	—	" "	30.04
1500			120	18	—	" "	30.02
1600			120	16 KTS	—	" "	30.02
1700			100	22 KTS	100	1-2 FT	29.98
1800			112	14	105	1-2 FT	29.98
1900			115	16	110	1-2 FT	30.00
2000			117	16 KTS	100	1-2 FT	30.02
2100			117	16 KTS	100	2-4 FT	30.03
2200			105	16 KTS	100	2-4 FT	30.03
2300			100	17 KTS	100	2-4 FT	30.04
2400			120	10 KTS	110	1-2 FT	30.03

Date 9 SEPT 61 Ship () Cruise No.

Organization Recorder

Sunrise: Time Position: Lat. , Long.

Sunset: Time Position: Lat. , Long.

Miles travelled from 0000 hours to sunrise =

Miles travelled from sunrise to sunset =

Miles travelled from sunset to 2400 hours =

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	BAR.
0100	LAYSAN ISLAND		120	10 KTS	—	CALM	30.03
0200	25-46N	171-44 W	110	14 KTS	—	CALM	30.01
0300	"	"	105	15 KTS	—	CALM	30.01
0400	"	"	118	15 KTS	155	1-3 FT	30.01
0500	"	"	115	16 KTS	155	1-3 FT	30.01
0600	"	"	120	17 KTS	160	1-3 FT	29.99
0700	"	"	105	16 KTS	160	1-3 FT	30.01
0800	"	"	110	16 KTS	110	1 FT	30.02
0900	"	"	115	12 KTS	110	1 FT	30.03
1000	"	"	107	20 KTS		1 FT	30.02
1100	"	"	115	16 KTS		1-2 FT	30.02
1200	"	"	110	16 KTS	100	1-2 FT	30.02
1300	"	"	120	16 KTS	100	1-2 FT	30.00
1400	"	"	130	16 KT	100	1-2 FT	29.99
1500	"	"	135	16 KT	105	1-2 FT	29.99
1600	"	"	100	17 KT	110	1-2 FT	29.98
1700	"	"	115	18 KT	100	1-2 FT	29.98
1800	"	"	105	18 KT	105	1-2 FT	29.98
1900	"	"	120	15 KT	115	1-2 FT	29.99
2000	"	"	120	13 KT	165	1-3 FT	29.99
2100	"	"	115	15 KT	165	1-3 FT	30.02
2200	"	"	120	12 KT	165	1-3 FT	30.03
2300	"	"	120	16 KT	165	1-3 FT	30.04
2400	"	"	120	16 KT	110	1-2 FT	30.04

Date 10 Sept Ship 14287 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

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5.

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt. BAN

0100	LAYSAN	Island	120	15 KT	120	1-2 FT	30.02
0200	25-46N	171-44W	120	15 KT	120	1-2 FT	30.02
0300	↑	↑	120	14 KT	120	1-2 FT	30.03
0400			130	13 KT	120	1-2 FT	30.01
0500			125	14 KT	120	1-2 FT	30.01
0600			129	15 KT	120	1-2 FT	29.99
0700			130	15 KT	120	1-2 FT	29.99
0800			115	12 KTS	120	1-2 FT	30.03
0900			125	14 KTS	125	1-2 FT	30.05
1000			125	14 KTS	125	1-2 FT	30.07
1100			125	18 KTS	125	1-2 FT	30.07
1200			130	12 KTS	190	1-2 FT	30.07
1300			110	13 KTS	180	1-2 FT	30.05
1400			110	14 KTS	180	1-2 FT	30.03
1500			118	12 KTS	180	1-2 FT	30.03
1600			120	12 KTS	180	1-2 FT	29.99
1700			120	12 KTS	180	1-2 FT	29.99
1800			120	10 KTS	180	1-4 FT	30.03
1900			115	10 KTS	180	1-2 FT	30.03
2000			115	8 KTS	180	1-2 FT	30.05
2100			110	5 KTS	—	CALM	30.08
2200			130	8 KTS	—	CALM	30.10
2300			110	7 KTS	—	CALM	30.11
2400	↓	↓	110	8 KTS	—	CALM	30.11

Pos 16.0N 162.0W
AT 110000Z 300° AT
12 KTS WIND 65 KTS

60 miles radius 30
WIND except to NE

SEAS 1-2 FT except

Date 11 SEPT Ship LT 2087 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
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1.

2.

3.

4.

5.

Hourly Positions:

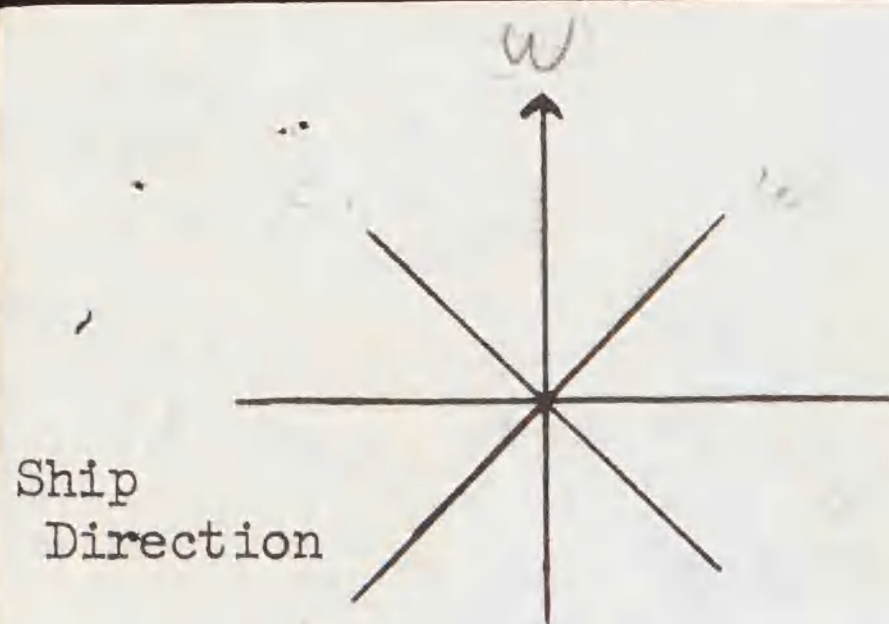
Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Bar
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0100	LAYSAN	ISLAND	100	5 KT	—	CALM	30.10
0200			098	4 KT	—	"	30.10
0300			110	4 KT	—	CALM	30.10
0400			105	2 KT	—	CALM	30.08
0500			115	6 KT	—	CALM	30.07
0600			105	4 KT	—	CALM	30.06
0700			110	4 KT	—	CALM	30.07
0800			085	4 KT	—	CALM	30.08
0900			090	5 KT	—	CALM	30.08
1000	25-48	171 31	089	9 KT	180	1-2 FT	30.09
1100	25-48	171 27	090	9 KT	180	1-2 FT	30.10
1200	25 48	171 14.5	075	4 KT	090	1-3 FT	30.09
1300	25 48	171 03.5	069	9 KT	080	1-3 FT	30.10
1400	25 48	170 53	074	9 KTS	085	1-3 FT	30.06
1500	25 49.5	170 40	063	5 KTS	080	1-3 FT	30.07
1600	25 47.5	170 23	060	8 KTS	080	2-4 FT	30.05
1700	25-48	170 10.2	090	11.5 KT	085	2-4 FT	30.07
1800	25-48	169-57.5	090	9 KT	085	2-4 FT	30.08
1900	25-48	169-45.8	048	10.5 KT	085	2-4 FT	30.09
2000	25-42	169-32	048	10.5 KT	090	1-4 FT	30.10
2100	25 42	169 22	049	11 KT	090	1-4 FT	30.10
2200	25-42	169-10	049	11 KT	090	1-4 FT	30.10
2300	25 42	168-58	068	9 KT	080	1-4 FT	30.08
2400	25 41.5	168 46	066	9 KT	080	1-4 FT	30.09

AK

25-40.5' N

146-57.5' W



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Ely

C/2pp

Date 22 Aug 67

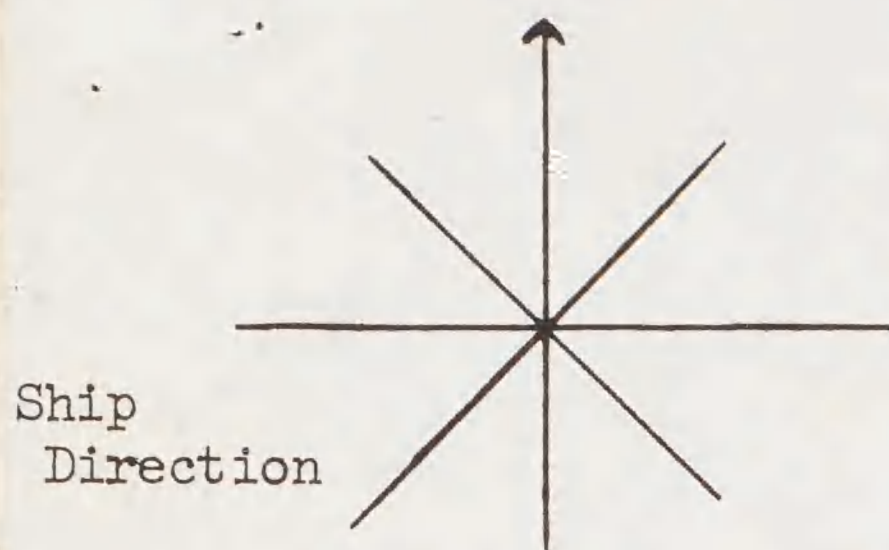
Pg. # 9

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0940	begin watch				
1004	R. f. Booby	1	→		adult
1008	Br. noddys?	1	→		
1018	wt. Shear.	5	→		loose flock (C+E) or close singles (RBC)
1021	wt. Shear.	1	→		
1028	wt. Shear	4	←		sitting on water
1030	Br. noddys	1	←		
1031	wt. Shear.	1	←		
1033	wt. Shear	3	←		sitting water.
1037	Sooty tern	1	←		
1043	w-r. storm petrel	1	←		white wing clearly seen
1044	w.t. shearwater	1	←		
1046	w.t. shearwater	1	→		
1047	w.t. shearwater	1	→		dark (northern) phase
1048	Br. noddys	1	→		
1054	Redft. (?) Booby	1			adult sitting on log.
1058	unk bird	1	→		dark, petrel like flight (?) RBC
1059	w.t. shearwater	1	→		light phase
1104	w.t. shearwater	1	→		"
1114	w.t. shearwater	1	→		"
1116	w.t. shearwater	1	→		"
1120	w.t. shearwater	1	→		dark phase
1125	w.r. storm petrel	1	←		fairly strong, direct flight; not butterfly-like or fluttering
H					
1137	break for chow to 1210				
1210	w.t. shearwater	2	←		
1213	w.t. shearwater	1	←		
1215	w.t. shearwater	1	←		
1215	w.t. shearwater	1	←		
1216	w.t. shearwater	1	←		
1219	white r. storm petrel	1	↓		flight rel. direct.
1228	w.t. shearwater	1	↑		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Clapp

Ely

Date 22 Aug. 67

Pg. # 2

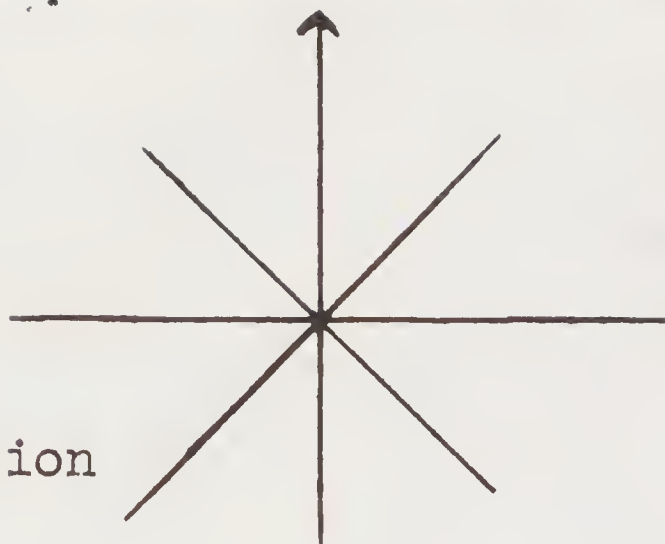
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1236	w.t. shearwater	1	→		light phase
1237	w.t. shearwater	1	→		"
1241	w.t. shearwater	1	↘		"
1307	Bulwer Petrel	1	→		C - 1st
1309	wt shearwater	1	↓		light phase
1309	"	2	↓		"
1317	Bulwer Petrel	1	↗		excellent view
1321	w.t.t. bird	1	←		up from water; adult, very long tail
1327	Dr. Noddy	1	↓		one sitting on log.
1327	w.t. shear-	1	↓		light phase
1341	w.t. shear	1	→		- dark phase
1342	Sooty Tern	1	↓		- adult
1343	WT Shear	1	←		- light phase
1355	Petrel sp	1	←		- light phase
1356	WT Shear	1	→		- light phase
1357	WT Shear	1	→		
1410	Bulwer's Pet	1	↓		
1424	Petrel sp	1	↙		
1434	Bulwer P	1	←		
1451	unk bird	1			
1456	w.t. shearwater	2	→		reported by water; not seen close
1456	unk adult	1	→		light phase
1508	Bulwer Petrel	1	↗		dark, high, arcs.
1517	w.t. shearwater	1	↗		light phase
1533	wt. sh. (?)	1	←		distant, 2 D. ?
1545	wt.t. bird	1	↓		hi; in direct flight; ground ship
1546	w.t. shearwater	1	→		light phase
1558	wt. shearwater	1	→		"
1601	unk. shearwater	1	→		hi arcs; faint; dark above.
1604	w.t. shearwater	1	→		light phase
1610	w.t. shearwater	1	→		"
1630	w.t. shear	1	→		
1631	w.t. shear	2	→		
1632	w.t. shear	1	→		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

My
My

Date 22 Aug 67
Pg.# 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1628	Bulwer's P	1	←	
1658	Bulwer's P	1	↑	
1710	Bulwer's P	1	→	
1713	W.T. Shear	1	→	
1714	"	1	→	
1715	"	1	→	
1716	"	1	→	
1717	"	1	→	
1719	Nowell's	1	→	
1720	WTTB	1	↘	
1721	W.T. Shear	1	→	
1731	Petrel sp	2	→	
1745	W.T. Shear	1	→	
1746	Nowell's	1	→	
1747	W.T. Shear	1	→	
1751	W.T. Shear	1	→	
1754	Nowell's	1	→	
1805	Bulwer's P	1	→	
1816	W.T. Shear	1	→	
1820				
1822	W.T. Shear	1	→	
1835	W.T. Shear	1	→	
1840	W.T. Shear	1	→	
1845	W.T. Shear	1	→	
1845	W.T. Shear	1	→	
1845	W.T. Shear	1	→	
1846	W.T. Shear	1	→	
1846	Nowell's (?)	1	→	
1847	Petrel sp	1	→	
1847	Petrel sp	1	→	
1850	W.T. Shear	1	→	
1850	W.T. Shear	1	→	
1900	W.T. Shear	1	→	
1900	W.T. Shear	1	→	
1902	W.T. Shear	1	→	
1903	W.T. Shear	1	→	

-all dark - fairly far off - 1 imp. line seen
Bulwer's Shear left when

observed at dark very
H.
H.

None seen

offshore

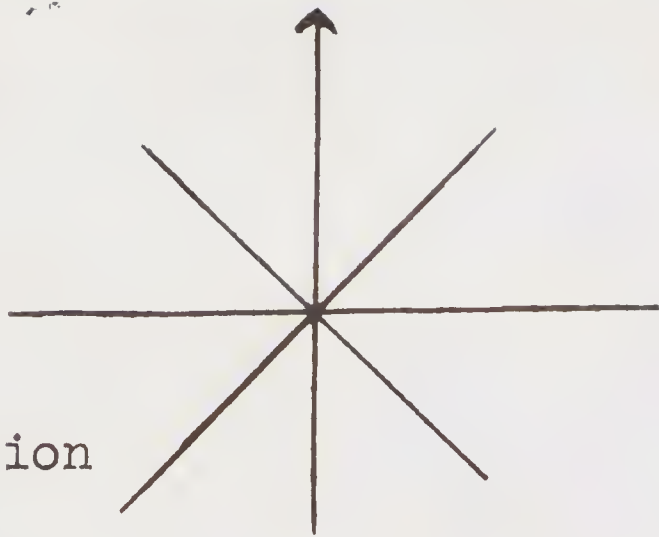
probably single with the other pair

H

single group

6 or 7 in to be seen

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date

Pg.#

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

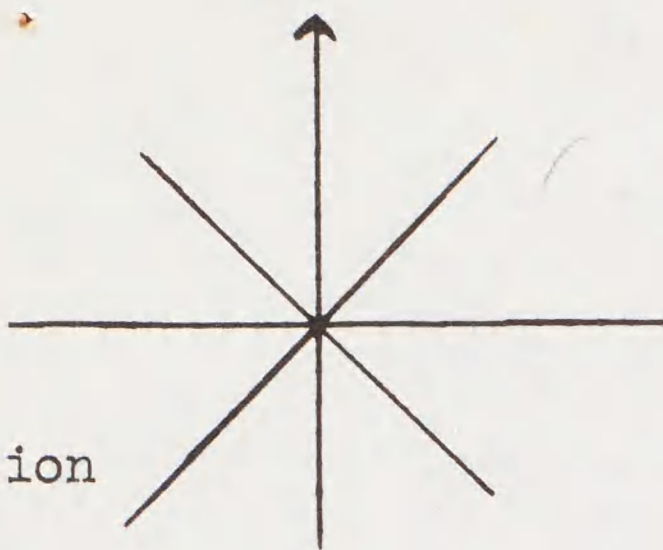
1904	W. T. Shear	1	→		very dark
1905	W. T. Shear	1			
1905	Blk / Bk	1	↙		dark - (faded) dark
1906	W. T. Shear	1	→		in dark & light for 20
1907	W. T. Shear	1	→		light phase
1907	W. T. Shear	1	→		
1909	W. T. Shear	3	→		
1910	Blk / Bk	1	→		dark - (faded)
1911	W. T. Shear	1	→		
1912		1	→		
1915					to 20
1915	W. T. Shear	1	←		very dark - (faded) dark
1918	W. T. Shear	1	→		very dark - (faded) dark

SET 22 -	1906	$21^{\circ}32.6'N$	$159^{\circ}49'W$
SET 23	1925	$23^{\circ}05'N$	$164^{\circ}40'W$
SET 24	1956	$24^{\circ}51'N$	$169^{\circ}47'W$
SET 25	2007	$26^{\circ}45.5'N$	$174^{\circ}13'W$

Sunset position - any Spt heard trip

Sunrise - missing - check distance & approximate

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

FLY
CLIPP

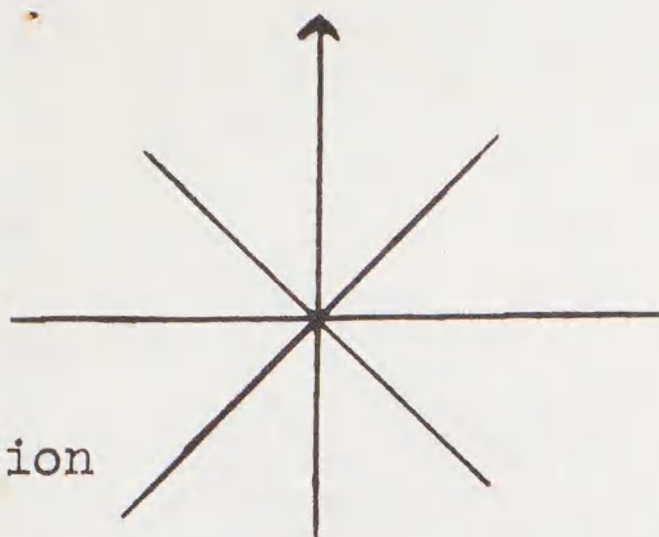
Date 23 Aug.
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0658	Bulwer's Pet	1	→		start watch
0702	"	1	←		right flight
0705	red t. fin	1	←		
0706	tern sp.	1	←		
0706	W.T. Shearwater	1	←		
0710	Sooty Tern	4	←		
0710	Sooty Tern	2	→		
0711	gull sp.	2	←		
0711	Sooty Tern	2	←		
0711	W.T. Shear	4	←		
0712	Fairy Tern	1	←		
0713	W.T. Shear	1	←		
0713	Bulwer's?	1	→		
0714	Bird sp	1	→		— soi dissant
0715	Sooty Tern	4	←		
0716	Bird sp	1	←		
0717	Bulwer's	1	←		— right across bow
0717	Wedge-t. shear	1	↻		
0718	Bulwers	1	←		close
0718	Bulwers	1	←		close
0718	Bulwers	1	←		close
0720	Bulwers	1	←		
0723	Bulwers	1	←		
0724	W.T. Shear	1	←		
0725	TB sp.	1	↻		
0726	Bulwers	1	↓		
0728	W.T. Shear	1	↓		
0729	Bulwers	1	←		
0730	W.T. Shear	1	←		
0731	RFB	1	←		— adult white phase
0732	Bulwers	1	←		
0732	Bulwers	1	←		
0732	Bulwers	1	←		
0733	ST	1	↓		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

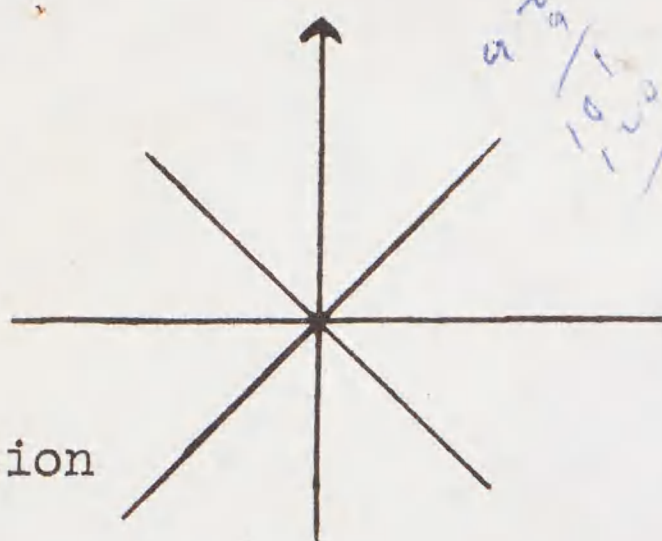
Clapp
Elv

Date 23 Aug 67
Pg. # 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0732	Booby sp?	1	←		distant
0733	Bird sp?	1	←		
0740	Wt	1	←		
0741	Pt + D A	1	←		molting - 1 central tail feather only 1/3 length of other
0742	Bulwers	1	←		
0743	ST	1	→		ad.
0743	ST	1	←		ad.
0743	Bulwers	1	←		
0744	ST	1	→		
0744	Bulwers	1	←		
0745	G.B. Tern	1	←		
0745	W.T. Shear	1	←		it.
0746	Bulwers	1	→		
0746	W.T. Shear	1	←		
0746	Bulwers	1	→		
0747	W.T. Shear	1	→		
0747	shear sp?	1	←		
0754	Bulwer P.	1	←		
0755	ST	1	→		
0755	Wt sh	1	←		
0756	S. b tern	1	→		adult
0756	ST	1	←		molting
0756	Pt + b	1	←		
0758	Wt. sh	1	→		
0759	Wt. sh	1	←		lighter on head
0800	Bulwer	1	→		
0800	Wt sh	1	←		
0802	Wt sh	1	→		dark phase
0803	W.T. Shear	2	→		
0803	W. tern	1	←		
0804	Wt. sh	1	→		1st flying fish seen
0807	Bulwer	1	→		
0808	"	1	←		dark
0808	"	1	→		
0809	B. & C	1	→		
0809	ST	3+	→		far out (flock 2)
0810	W. tern	1	→		
0810	Bulwer	1	→		
0810	W. tern	1	←		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Chap
Shy

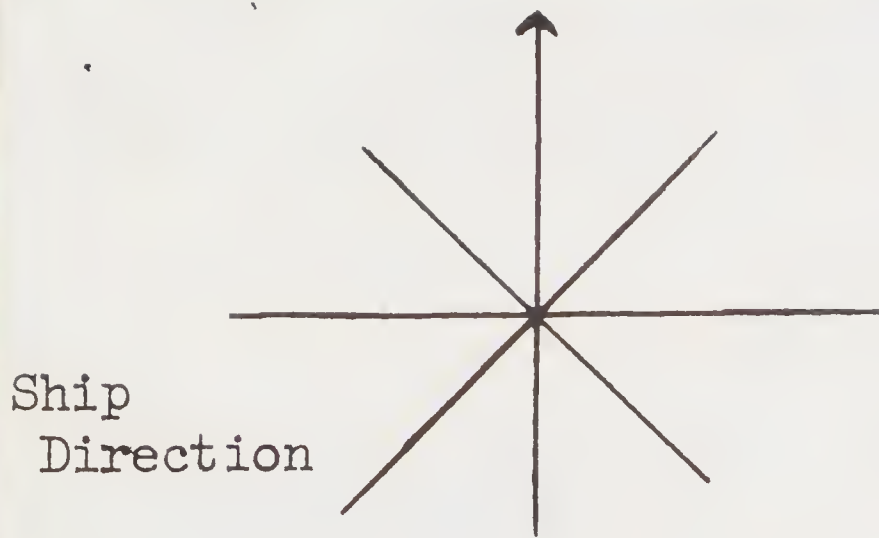
Date 23 Aug. 67
Pg.# 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	0810	W. Tern	1			
	0812	Bul get	5	←		fresh?
	0814	W.T. shear	1	←		one.
	0815	Bul Bat	1			
	0815	W. Tern	1	←		
FF	0816	W.T. shear	120 ±			feeding
		5 tern	30 ±			
no tern off		2000 ft.	1			clearance
1000 ft.		800 ft.	1			♀
500 ft.		400 ft.	1			subad.
some birds in water		Br. noddys	5 ±			clearly seen
		Ch. Pet	1 ±			looked most too dark for W.T. but no good
		Bul Bat	5 ±			size comparison
	0841	Sooty tern	1	←		But one
		W.T. shear	2			
	0845	Bul Bat	1	←		
	0846	Bul Bat	1	←		
	0846	W.T. sk	1	←		
	0850	g.b. tern	1	↓		may have been imm?
	0857	Sooty tern	1	↘		right on string
	0858	Bul Bat	1	↘		close
	0902	W.T. Shear	1	←		It.
	0905	Bulwer's	1	↘		-close to ship
	0907	Bulwer's	1	↘		
	0917	Bulwer's	1	←		-close to ship
TF	0927	WTS	5			
		FT	1			
		Bulwer's	3-11			
		undercut	5			
TF	0933	R.F.B.	1			
		Brown Noddy	25			
		G.B. Tern	1			
		Wedgetail	2-3			
		Bulwer's	2-3			

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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Chapman

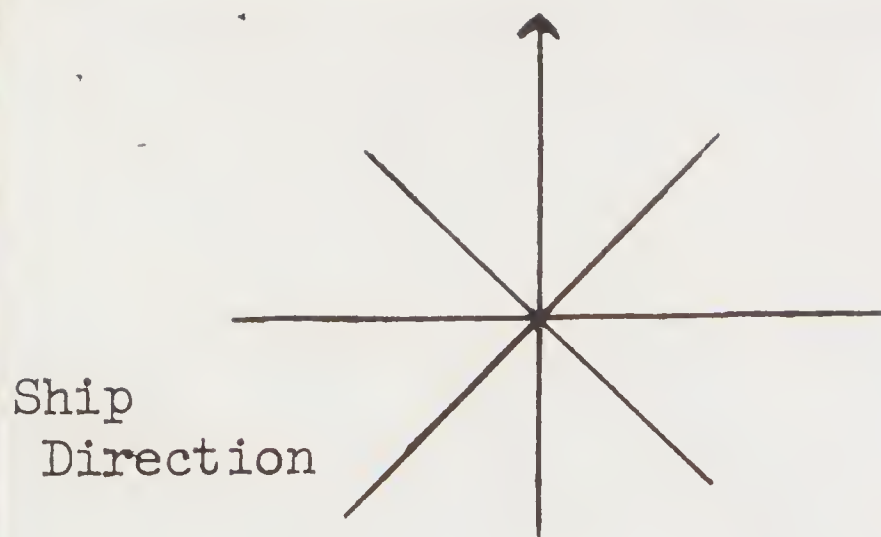
Date 23 Aug 67
Pg.# 1

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0930	RTTB	1	↘		so many birds in light you can't count
0943	Bulwer's	1	↘		
0948	Bulwer's	1	→		
0950	Bulwer's	1	→		
0952	G.B. Tern	2	↘		
1000	F.T. -?	2	↘		
1000	WT. Shear	1	↘		
1004	wt shear	1	↘		
1005	wt shear	1	→		
1006	wt shear	1	↘		
1008	wt shear	1	↘		
1014	Bulwer's	1	↘		
1017	Bulwer's	1	↘		
1018	wt shear	1	↘		
1019	Bulwer's	1	↘		
1020	wt shear	1	↘		
1021	Bulwer's	1	↘		
1022	wt shear	1	↘		
1025	Bulwer's	1	↘		
1028	wt shear	1	→		
1033	wt shear	1	↘		
1034	wt shear	2	→		
1040	Bulwer's	1	↘		
1047	Bulwer's	1	→		
1048	Bulwer's	1	→		
1049	wt shear	1	→		
1051	wt shear	1	→		
1052	wt shear	1	→		
1053	Bulwer's	2	→		
1054	wt shear	1	↘		
1100	wt shear	2	→		
1101	wt shear	1	→		
1103	wt shear	1	→		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Chapp
Chap

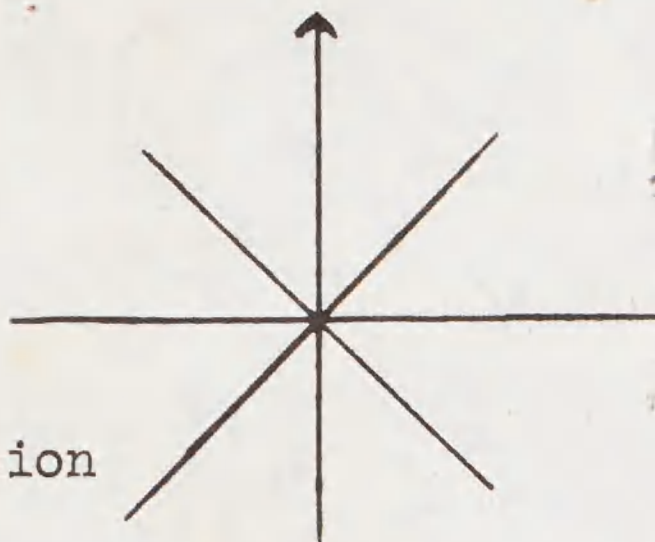
Date 23 Aug 1967
Pg.# 5

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1113	Bul sp	3-4	→		very out ahead
1114	W.T. Shear	1	↓		
1114	Fairy Tern	1	↓		- approached ship closely. Fly over bridge
1116	W.T. Sh.	1	→		
1127	Bulwer's	1	↙		
1127	W.T. Sh.	1	↙		H.
1128	W.T. Sh.	1	↙		H.
1131	Shear sp.	1	→		
1135	Bulwer's	1	↙		
1136	W.T. Sh.	1	→		H.
1136	W.T. Sh.	1	→		H.
1137	W.T. Sh.	1	↓		H.
1138	W.T. Sh.	1	↗		H.
1139	Bulwer's	1	↗		
1144	W.T. Sh.	1	↓		H.
1145	Bulwer's	1	→		
1145	Bulwer's	1	→		
1153	Shear sp.	1	→		
1157	Bul sp	1	→		way the hell out
1158	Fairy Tern	1	↓		pulling bulwer's heads
1159	Bulwer's	1	↙		
1159	Shear sp.	1	↙		first w/ floppy, small, nearly level flight
1201	F. Tern	2	↙		phases?
1213	W.T. Sh.	1	→		both coming in to ship
1214	W.T. Sh.	1	→		
1220	W.T. Sh.	1	→		
1221	W.T. Shear	1	→		H.
1222	G. B. Tern	1	↙		
1222	Shear-pet?	1	→		
1223	Bulwer's	1	↙		
1224	W.T. Shear	1	↙		H.
1225	W.T. Shear	1	→		H.
1225	W.T. Shear	1	→		H.
1248	G. B. Tern	1	↙		
1250	G. B. Tern	1	↙		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Alamy

Date 23 Aug. 1967
Pg.# 6

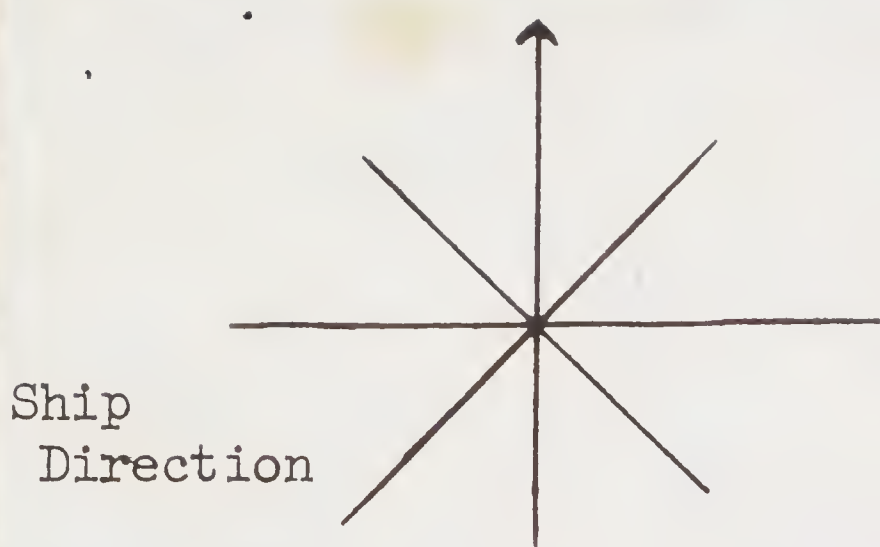
SPECIMEN

or

(60)

TIME SPECIES # DIR. BAND NO. REMARKS

	1300	W.T. Shear	1	←		H.
	1302	RFB	1	↙		- subad. white phase (spotted back)
	1352	W.T. Shear	1	→		
	1353	W.T. Shear	1	→		
	1401	W.T. Shear	1	↘		H.
	1404	W.T. Shear	2	↘		
	1425	W.T. Shear	1	→		Right foot, point of foot long back; white flank feathers -
	1432	Blue Pet	1	←		blue character more obvious than blue bird, Right cat.
	1432	W.T. Shear	1	→		
	1441	Blue Pet	1	→		
	1444	W.T. Shear	1	↘		
	1445	Ad. pet	1	↙		
	1446	Ad. pet	1	↙		
	1450	W.T. Shear	3	↘		
	1452	W.T. Shear	1	↓		flush in this 100 yds off starboard in field
TF	1456	W.T. Shear	1	↓		next vessel, this part
	1504	Bulwer's	1	↓		
TF	1508	W.T. Shear	ca. 30	↗		are all dark shearwater in brush? not seen well
		GB Tern?	1	↗		
	1511	W.T. Shear	Φ	↗		H.
	1511	W.T. Shear	Φ	↗		H.
	1511	W.T. Shear	Φ	↗		H.
	1514	W.T. Shear	1	↗		H.
	1517	Bulwer's	1	↙		
	1530	W.T. Shear	1	↙		H.
	1530	W.T. Shear	1	↙		H.
	1530	Shear-pet	1			
	1530	Shear-pet	1			Distant, probably Wedge-tails.
	1530	Shear-pet	1			
	1541	Brown Noddy	1	→		apparently had been sitting in passing
	1543	W.T. Shear	1	→		H. drift log.
	1554	RFB	1	↗		ad. white phase
	1554	Bulwer's	1	↗		
	1621	P.T.T. Shear	2	↗		prob. 1 of same bird
	1622	P.T.T. Shear	1	↗		
	1623	W.T. Shear	1	→		part. shearwater



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

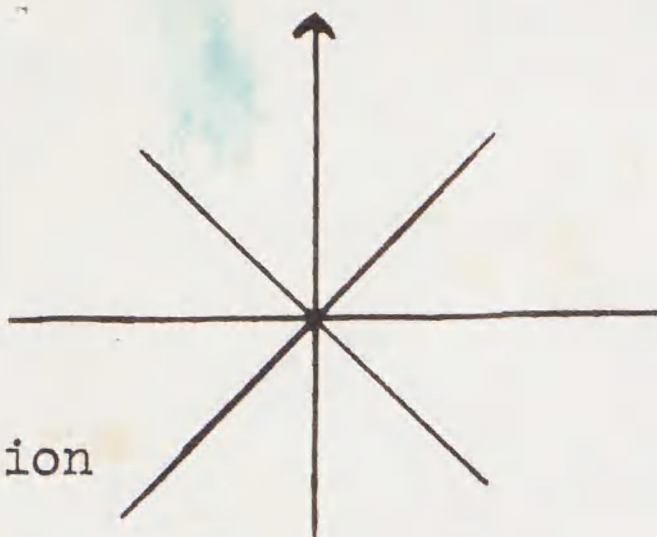
Date 23 Aug 1967
Pg. # 17

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1626	wt. sh. ?	1	→		only 1 - light green - long streamer noted
1637	wt. sh.	1	→		
1643	wt. sh.	1	→		
1636	Bul. gull	1	→		
1634	wt. sh.	1	→		
1652	wt. sh.	2	↘		
1705	wt. sh.	1	↘		
17	wt. sh.	1	↘		
1706	wt. sh.	1	↘		1720 - 1000 ft. high
1705	wt. sh.	1	↘		
1728	wt. sh.	1	↘		
1734	wt. sh.	1	↘		H.
1740	Golden Plover	2	↘		
1741	P.T.T.B.	1	↘		1st
1743	G.B. Tern	1	↘		2nd
1747	P.T.T.B.	1	↘		1st
1751	Bulwer's	1	↘		2nd
1755	G. Plover	1	↘		
1756	wt. sh.	1	↘		
1800	wt. sh.	1	↘		
1802	wt. sh.	1	↘		
1804	Bul. gull	1	→		
1807	wt. sh.	1	→		
1812	g. tern	4	→		not actually feeding
	wt. sh.	3	→		
	Bul. gull	1	→		
1816	wt. sh.	1	←		
1817	wt. sh.	1	←		
1820	g. tern	1	←		
1822	g. tern	1	←		
1832	Bul. gull	1	→		
1841	Bul. gull	1	→		

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Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Chapman
2200

Date *23 May 1967*
Pg. # *48*

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1843	g. gull	1	↖		<i>small bird in flight?</i>
1852	Bul pet	1	←		
1907	Bul pet	1	→		
1908	Bul pet	1	←		
1909	RFB	1	→		
TP 1912	FT	0.14	→		Flying high 50-100 feet - in advance of Ply low 10-20 feet - but little groups (consequently together) flying in same direction
	Br. Noddy	0.10	→		
	WT SH	1	→		
1915	FT	1	→		
1915	WT SH	1	→		1st.
1916	WT SH	1	→		11.
1920	WT SH	1	→		?
1925	WT SH	1	→		11.
1925	WT SH	1	→		Sunset -
1931	wt sh	1	→		
1933	wt sh	1	→		
1933	shrouding	1	→		distat
1934	Bul petal	1	←		
1936	wt. shrouding	1	→		
1937	wt. shrouding	1	→		
1939	wt. shrouding	1	→		

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